



Taking stock and looking ahead: research on antecedents and impact of sustainable entrepreneurship

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Abstract This article introduces the special issue “Antecedents and Impact of Sustainable Entrepreneurship: An International Perspective.” It reviews previous special issues in the field and situates the present volume within this evolving body of scholarship. Common thematic and methodological patterns are identified alongside persistent shortcomings. The article concludes with a research agenda that highlights several critical gaps, including the limited number of rigorous studies assessing the actual impact of sustainable entrepreneurship, insufficient research on scaling and diffusion processes, and the need for replication studies to mitigate potential biases stemming from single-context empirical designs.

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Plain English Summary This article introduces a special issue examining the antecedents and impact of sustainable entrepreneurship. As guest editors, we review the extant literature and observe that although considerable progress has been made in understanding the motivations and processes underlying sustainable entrepreneurial activity, the field lacks systematic evidence of its actual environmental and societal outcomes. Existing research predominantly relies on small-scale, context-specific studies, which constrain the generalizability of findings across national and institutional settings. The present special issue addresses these limitations by featuring studies employing cross-country comparative designs and longitudinal data. We advocate for future research to prioritize several complementary avenues: the scaling of sustainable ventures, replication studies across different institutional settings to enhance empirical rigor, and improved measurement of impacts, particularly those extending beyond firm-level financial performance. Without such evidence, the central proposition of sustainable entrepreneurship that profit and purpose can be jointly advanced to generate meaningful well-being change remains insufficiently substantiated.

Keywords Entrepreneurship · Sustainability · Impact assessment · Grand challenges · Sustainable entrepreneurship

JEL Classification L26 · L31 · M13 · O35 · Q56

1 Introduction

The global context in which this special issue appears could hardly be more pressing. Climate change, the aftermath of the COVID-19 pandemic, biodiversity loss, rising inequality, and geopolitical instability have created a moment of profound societal and economic uncertainty. Governments and international institutions increasingly highlight the need for systemic transformation toward sustainability in documents such as the European Green Deal or the United Nations Sustainable Development Goals (SDGs). At the same time, the paradigm of sustainability experiences growing skepticism. In this setting, entrepreneurship is often framed as a vital mechanism for change, mobilizing innovation, unlocking new markets, and creating solutions that address environmental and social imperatives. Thus, following Schumpeter (1982), sustainable entrepreneurship can be understood as a mechanism of creative destruction. It destroys unsustainable structures and practices (such as industries centered around fossil fuels) by creating more sustainable alternatives (e.g. renewable energies, electric mobility) (Hockerts & Wüstenhagen, 2010). Yet while the rhetoric surrounding sustainable entrepreneurship is powerful, our scholarly understanding of its antecedents and impacts on sustainable development remains uneven, fragmented, and in need of greater international scope.

Over the past two decades, sustainable entrepreneurship has emerged as a dynamic research domain, situated at the intersection of innovation, environmental stewardship, and social equity. Entrepreneurship is increasingly being recognized “as a significant conduit for bringing about a transformation to sustainable products and processes, with numerous high-profile thinkers advocating entrepreneurship as a panacea for many social and environmental concerns” (Hall, et al., 2010, pp. 439). This dual promise of wealth creation and sustainable impact resonates strongly with policymakers, practitioners, and scholars alike.

This special issue of *Small Business Economics*, titled “Antecedents and Impact of Sustainable Entrepreneurship: An International Perspective,” aims to both survey the current state of the field and propel scholarly inquiry forward. Through an international lens, it seeks to deepen our understanding of the drivers and consequences of sustainable entrepreneurship. By emphasizing the international perspective,

we acknowledge that prior research has examined a range of antecedents and outcomes of sustainable entrepreneurship. However, it has done so predominantly within specific—and often isolated—national contexts. Consequently, there remains a substantial need for studies that employ international comparisons, incorporate cross-national contextualization, or replicate earlier findings across a broader set of countries. In this introduction to the special issue, we briefly trace the evolution of research in this domain, synthesize current insights, identify key gaps in the literature, and outline promising avenues for future research that are both academically rigorous and societally relevant. Specifically, we add to the field of sustainable entrepreneurship by highlighting the need for more studies on the actual impact of sustainable entrepreneurship, which will be essential for legitimizing the central claim of the research field, that is the ability of sustainable entrepreneurship to connect wealth creation and actual impact to sustainable development by innovative, transformative impulses. Additionally, we emphasize the need for research on scaling and diffusion processes as only a (collective) impact of meaningful magnitude can contribute to the legitimization of the field. Last, we highlight the need for replication studies to mitigate potential biases stemming from single-context empirical designs and to emphasize the rigor of the research fields central claims. In what follows, we briefly chart the evolution of research in this area, highlight what we currently know, identify key research gaps, and suggest promising avenues for advancing knowledge that are both academically rigorous and societally relevant.

2 Early sustainable entrepreneurship research: the foundational decades

The intellectual foundations of sustainable entrepreneurship were laid in the early 2000s, when scholars began to connect ecological concerns with theories of entrepreneurship, of market failure, and of welfare. Cohen and Winn (2007) and Dean and McMullen (2007) argued that the market and institutional imperfections and inefficiencies that give rise to environmental degradation, create opportunities for new ventures to develop cleaner technologies and more inclusive business models. Their analysis emphasized the Schumpeterian role of entrepreneurs in processes

of *creative destruction*, suggesting that sustainability pressures create new market niches that entrepreneurs can exploit. This role is the essence of capitalist dynamics and concerns not invention—the generation of new ideas—but innovation—making them work in a commercially viable fashion. Hence, in the Schumpeterian logic innovation represents a more demanding and consequential endeavor than invention alone (Henrekson et al. 2024).

The early 2010s witnessed an effort to consolidate the field through definitional work and empirical exploration. Shepherd and Patzelt's (2011) influential framework conceptualized sustainable entrepreneurship as the pursuit of opportunities that preserve nature, life support, and community while simultaneously generating *economic* and *non-economic* value. This conceptualization has been widely adopted and has helped differentiate sustainable entrepreneurship from related but distinct domains, such as corporate social responsibility and social entrepreneurship. Pacheco et al. (2010) advanced the discussion by emphasizing institutional entrepreneurship, showing how entrepreneurs do not merely exploit opportunities but actively reshape the institutional context to create green markets. By the end of the decade, several scholars examined stakeholder theory as a pragmatic, albeit optimistic, framework for guiding corporate action toward sustainable development (Hörisch et al., 2014; Schaltegger et al., 2019). While essential for establishing conceptual foundations, this interest in definitions and theorizing risked privileging ontological debates over empirical investigation of the praxis of sustainable entrepreneurship.

Nevertheless, applied empirical work during this period expanded meaningfully (Hörisch et al., 2017; Hoogendoorn et al., 2020). Scholarship in this area has developed along complementary lines. Some scholars focus on how sustainability values shape organizational design, while others examine the alignment of entrepreneurial identity with environmental aims. A significant strand of research investigates hybrid governance models, such as certified B Corporations, which formally institutionalize sustainability (Parrish, 2010; Stubbs, 2017; York et al., 2016). This wave of empirical research deepened understanding of the motivations, strategies, and organizational forms that characterize sustainable entrepreneurship. Yet, as Muñoz and Cohen (2018) noted in their review, much of the work remained context-specific,

often focused on small samples, particular industries, or single geographies, limiting the field's generalizability and comparative scope.

3 Sustainable entrepreneurship in the 2020s

By the 2020s, sustainable entrepreneurship had coalesced into a distinct subdiscipline, with ongoing debates, methodological conventions, and dedicated special issues (Genus, 2021). This maturation enabled the field to transcend definitional concerns, turning instead to the examination of its practical applications, measurable impact, and global scalability.

One notable development has been an emphasis on contextual embeddedness. Recent research shows how the personal histories, cultural capital, and institutional biographies of entrepreneurs shape their approaches to sustainability (Genus, 2021; Lawrence et al., 2011). Rather than viewing entrepreneurs as rational opportunity seekers responding to market signals, this literature highlights how deeply embedded social and institutional contexts influence entrepreneurial trajectories. In doing so, it challenges the earlier tendency to universalize entrepreneurial motivations, foregrounding instead how place, identity, and social practice structure entrepreneurial action. This contextual sensitivity is evident in circular entrepreneurship, where the adoption of circular business models is shaped by internal factors (i.e., such as leadership commitment and environmental values) and external factors (i.e., including regulatory frameworks and regional support ecosystems). Entrepreneurial motivations vary accordingly, with some founders driven by financial opportunities while others act from deep-seated personal commitment to environmental and social goals. Indeed, the success of circular ventures depends on broader support structures (i.e., network interactions, university engagement, and intermediaries like incubators), revealing how institutional embeddedness fundamentally conditions entrepreneurial possibilities (Suchek et al., 2022).

Another trend has been the diversification of entrepreneurial forms. An emerging body of work suggests that tensions between economic, social, and environmental goals are not anomalies to be dismissed but inherent features of corporate sustainability. Building on this insight, Hahn et al. (2015) propose an

integrative framework that conceptualizes these contradictions as paradoxes, arguing that rather than seeking alignment, firms must learn to accept and manage the resulting tensions across different levels, time horizons, and contexts. Scholars have increasingly highlighted the emergence of alternative logics of value creation, such as regenerative entrepreneurship (Muñoz & Hernandez, 2024), “activist entrepreneuring” (Dey & Mason, 2018; Monteverde et al., 2025), corporate entrepreneurship (Gerlich et al., 2025) and humane entrepreneurship (Parente et al., 2021). These approaches reject the assumption of inherent trade-offs between financial, social, and environmental goals, instead framing entrepreneurship as a complex and goal-complementary pathway toward organizational emergence (Muñoz & Dimov, 2015). Such perspectives underscore that sustainable entrepreneurship is not simply about mitigating harm and managing tensions, but can also be about proactively reimagining creative modes of production and consumption, also for the common good (Hoogendoorn et al., 2020; Schaltegger & Wagner, 2011).

A third key development has been the broadening of scope, moving from localized sustainable impact to an explicit engagement with societal grand challenges. Fernhaber and Zhou (2022) discuss how sustainable entrepreneurship is increasingly linked to global issues such as poverty, climate change, refugee displacement, and pandemics. Framing sustainability within the language of “grand challenges” underscores the complexity, urgency, and transnational nature of the problems that entrepreneurs seek to address. Yet, as they argue, research on entrepreneurship and international business has developed largely in parallel, with the former emphasizing opportunities and agency, and the latter stressing the global reach of multinational enterprises. Integrating these perspectives through the lens of sustainable international entrepreneurship offers a promising pathway forward, enabling a richer understanding of how entrepreneurial solutions to broad sustainability challenges can be both managed, developed and scaled globally (Markman et al., 2019).

4 A review of previous special issues on sustainable entrepreneurship

The present special issue was preceded by previous special issues on sustainable entrepreneurship and

related fields. A pioneering special issue in the field on “Sustainable development and entrepreneurship” by Hall et al. (2010) laid the path for concept development and consisted of many conceptual (Pacheco et al., 2010; York et al., 2010; Hockerts & Wüstenhagen, 2010) and empirical papers (Meek et al., 2010; Parrish, 2010; Kuckertz & Wagner, 2010) which are still considered cornerstones in the field. Many more special issues followed, which contributed to a certain level of maturity in the research field (Edmondson & McManus, 2007). Still, fundamental questions of what drives sustainable entrepreneurship (i.e., the antecedents) and its actual contribution to sustainable development have not been quantitatively investigated or even replicated recognizing potential international differences. An overview of special issues on sustainable entrepreneurship is shown in Table 1.

Table 2 structures the contributions to previous special issues along the main lines of interest of this special issue, i.e., the antecedents and impacts of sustainable entrepreneurship. It highlights that most contributions took a different (and equally relevant) perspective, investigating the what and how of sustainable entrepreneurship (Crucke & Knockaert, 2016; Stephan et al., 2023; Branzei & Fathallah, 2023). Likewise, multiple articles addressed the antecedents of sustainable entrepreneurship (Meek et al., 2010; Kuckertz & Wagner, 2010; Akemu et al., 2016). Yet, these articles investigate a very diverse range of antecedents, identifying different points of intervention, such as social norms (Meek et al., 2010); individual values and experiences (Kuckertz & Wagner, 2010), or entrepreneurial ecosystems (Bischoff, 2021). Thus, if analyzed from the perspective of the maturity of research fields (Edmondson & McManus, 2007), research on the antecedents of sustainable entrepreneurship is far from mature, as indicated by a lack of quantitative studies that replicate, test, or specify earlier work. Lastly, Table 2 highlights that compared to the “why” and “how” of sustainable entrepreneurship, we know surprisingly little about its actual impact. Given that the central justification of the research field is its contribution to sustainable development, this insight is surprising. Only a few articles explicitly address the impact of sustainable entrepreneurship (Neumann, 2022; Karahan et al., 2022; Hirschmann & Block, 2022), most of which stem from the special issue in the Journal of Cleaner Production (Fichter et al., 2022).

Table 1 Earlier special issues on sustainable entrepreneurship

Title	Year	Journal	Editors
Sustainable Development and Entrepreneurship	2010	<i>Journal of Business Venturing</i>	J. K. Hall, G. A. Daneke, M. J. Lenox
Entrepreneurship as a Platform for Pursuing Multiple Goals: A Special Issue on Sustainability, Ethics, and Entrepreneurship	2016	<i>Journal of Management Studies</i>	G. D. Markman, M. Russo, G. T. Lumpkin, P. D. Jennings, J. Mair
Advancing Sustainable Entrepreneurship Through Substantive Research	2018	<i>International Journal of Entrepreneurial Behavior & Research</i>	P. Muñoz, F. Janssen, K. Nicolopoulou, K. Hockerts
Collaborative entrepreneurship for sustainability: Creating solutions in light of the UN sustainable development goals	2018	<i>International Journal of Entrepreneurial Venturing</i>	S. Schaltegger, M. Beckmann, K. Hockerts
Sustainable entrepreneurship: creating environmental solutions in light of planetary boundaries	2018	<i>International Journal of Entrepreneurial Venturing</i>	S. Schaltegger, M. Beckmann, K. Hockerts
E Pluribus Unum: Impact Entrepreneurship as a Solution to Grand Challenges	2019	<i>Academy of Management Perspectives</i>	G. D. Markman, T. L. Waldron, P. T. Gianiodis, M. I. Espina
Sustainable Entrepreneurship Research in the 2020s: An Introduction	2021	<i>Business Strategy and the Environment</i>	A. Genus
Sustainable Entrepreneurial Ecosystems	2021	<i>Small Business Economics</i>	C. Volkmann, K. Fichter, M. Klofsten, D. Audretsch
Crises, Covid-19, and Entrepreneurship	2023	<i>Entrepreneurship Theory and Practice</i>	B. Batjargal, S. Jack, T. Mickiewicz, E. Stam, W. Stam, K. Wennberg
Sustainable Entrepreneurship in Times of Crises	2022	<i>Journal of Cleaner Production</i>	K. Fichter, F. Lüdeke-Freund, S. Schaltegger, S. Schillebeeckx
Entrepreneurship, sustainability, and urban development	2024	<i>Small Business Economics</i>	H. Qian, J. Wu, S. Zheng

This special issue complements previous findings and advances the sustainable entrepreneurship literature by deliberately shifting focus from the “what” and “how” of entrepreneurial processes which dominated prior special issues, to a more rigorous and internationally oriented examination of antecedents and, critically, impacts. By focusing on the impacts of sustainable entrepreneurship on sustainable development, this special issue takes an important step towards legitimizing the central claim of the research field, that is the ability of sustainable entrepreneurship to connect wealth creation and actual impact to sustainable development by innovative, transformative impulses. While many previous collections emphasized conceptual development and context-specific case studies, this volume introduces methodological innovation through longitudinal datasets (e.g., Bergmann & Rychener, 2026; Kotiranta et al., 2026) and cross-country comparative designs (e.g., Capelleras et al., 2026), thereby

addressing persistent calls for replication and generalizability. Theoretically, it moves beyond isolated motivational accounts to integrate multi-level institutional dynamics, regulatory heterogeneity, and the temporal evolution of tensions in scaling sustainable ventures (Zeng et al., 2026). In doing so, it responds directly to the field’s fragmentation by prioritizing external validity, multi-contextual replication, and the measurement of tangible sustainability outcomes.

Table 3 classifies the articles included in this special issue into the same categories as those used to analyze the previous special issues. Although it is sometimes difficult to categorize, the overview in Table 3 shows that in the present special issue, there is no focus on research dealing with the implementation (what/how) view, like in previous special issues. While none of the papers aim at replicating existing studies in a new (international) context, we observe that at least two studies test some known effects based

Table 2 Articles in previous special issues on sustainable entrepreneurship

Why/Antecedents	What/How	Impacts/Consequences
Hockerts, K., & Wüstenhagen, R. (2010). Greening Goliaths versus emerging Davids—Theorizing about the role of incumbents and new entrants in sustainable entrepreneurship. <i>Journal of Business Venturing</i> , 25(5), 481–492	Crucke, S., & Knockaert, M. (2016). When stakeholder representation leads to faultlines. A study of board service performance in social enterprises. <i>Journal of Management Studies</i> , 53(5), 768–793	York, J. G., & Venkataraman, S. (2010). The entrepreneur-environment nexus: Uncertainty, innovation, and allocation. <i>Journal of Business Venturing</i> , 25(5), 449–463
Kuckertz, A., & Wagner, M. (2010). The influence of sustainability orientation on entrepreneurial intentions—Investigating the role of business experience. <i>Journal of Business Venturing</i> , 25(5), 524–539	Waldron, T. L., Fisher, G., & Pfarrer, M. (2016). How social entrepreneurs facilitate the adoption of new industry practices. <i>Journal of Management Studies</i> , 53(5), 821–845	Dickel, P. (2018). Exploring the role of entrepreneurial orientation in clean technology ventures. <i>International Journal of Entrepreneurial Venturing</i> , 10(1), 56–82
Meek, W. R., Pacheco, D. F., & York, J. G. (2010). The impact of social norms on entrepreneurial action: Evidence from the environmental entrepreneurship context. <i>Journal of Business Venturing</i> , 25(5), 493–509	Abdelkafi, N., & Hansen, E. G. (2018). Ecopreneurs' creation of user business models for green tech: An exploratory study in e-mobility. <i>International Journal of Entrepreneurial Venturing</i> , 10(1), 32–55	Doh, J. P., Tashman, P., & Benischke, M. H. (2019). Adapting to grand environmental challenges through collective entrepreneurship. <i>Academy of Management Perspectives</i> , 33(4), 450–468
Pacheco, D. F., Dean, T. J., & Payne, D. S. (2010). Escaping the green prison: Entrepreneurship and the creation of opportunities for sustainable development. <i>Journal of Business venturing</i> , 25(5), 464–480	Bergset, L. (2018). Green start-up finance—where do particular challenges lie? <i>International Journal of Entrepreneurial Behavior & Research</i> , 24(2), 451–575	Jones, J., York, J. G., Vedula, S., Conger, M., & Lenox, M. (2019). The collective construction of green building: Industry transition toward environmentally beneficial practices. <i>Academy of Management Perspectives</i> , 33(4), 425–449
Parrish, B. D. (2010). Sustainability-driven entrepreneurship: Principles of organization design. <i>Journal of Business Venturing</i> , 25(5), 510–523	Bischoff, K., & Volkmann, C. K. (2018). Stakeholder support for sustainable entrepreneurship—A framework of sustainable entrepreneurial ecosystems. <i>International Journal of Entrepreneurial Venturing</i> , 10(2), 172–201	Esteves, A. M., Genus, A., Henfrey, T., Penha-Lopes, G., & East, M. (2021). Sustainable entrepreneurship and the Sustainable Development Goals: Community-led initiatives, the social solidarity economy and commons ecologies. <i>Business Strategy and the Environment</i> , 30(3), 1423–1435
Akemu, O., Whiteman, G., & Kennedy, S. (2016). Social enterprise emergence from social movement activism: The Fairphone case. <i>Journal of Management Studies</i> , 53(5), 846–877	Breuer, H., Fichter, K., Lüdtke-Freund, F., & Tiemann, I. (2018). Sustainability-oriented business model development: Principles, criteria and tools. <i>International Journal of Entrepreneurial Venturing</i> , 10(2), 256–286	Bhatnagar, R., Keskin, D., Kirkels, A., Romme, A. G. L., & Huijben, J. C. M. (2022). Design principles for sustainability assessments in the business model innovation process. <i>Journal of Cleaner Production</i> , 377, 134,313
Alt, E., & Craig, J. B. (2016). Selling issues with solutions: Igniting social intrapreneurship in for-profit organizations. <i>Journal of Management Studies</i> , 53(5), 794–820	Gasbarro, F., Rizzi, F., & Frey, M. (2018). Sustainable institutional entrepreneurship in practice: Insights from SMEs in the clean energy sector in Tuscany (Italy). <i>International Journal of Entrepreneurial Behavior & Research</i> , 24(2), 476–498	Bendig, D., Kleine-Stegemann, L., Schulz, C., & Eckardt, D. (2022). The effect of green startup investments on incumbents' green innovation output. <i>Journal of Cleaner Production</i> , 376, 134,316
Calic, G., & Mosakowski, E. (2016). Kicking off social entrepreneurship: How a sustainability orientation influences crowdfunding success. <i>Journal of Management Studies</i> , 53(5), 738–767	Hörisch, J. (2018). 'Think big' or 'small is beautiful'? An empirical analysis of characteristics and determinants of success of sustainable crowdfunding projects. <i>International Journal of Entrepreneurial Venturing</i> , 10(1), 111–129	Coffay, M., Coenen, L., & Tvetérås, R. (2022). Effectuated sustainability: Responsible Innovation Labs for impact forecasting and assessment. <i>Journal of Cleaner Production</i> , 376, 134,324

Table 2 (continued)

Why/Antecedents	What/How	Impacts/Consequences
Shevchenko, A., Lévesque, M., & Pagell, M. (2016). Why firms delay reaching true sustainability. <i>Journal of Management Studies</i> , 53(5), 911–935	Mintrom, M., & Thomas, M. (2018). Policy entrepreneurs and collaborative action: Pursuit of the sustainable development goals. <i>International Journal of Entrepreneurial Venturing</i> , 10(2), 153–171	Di Vaio, A., Hassan, R., Chhabra, M., Arrigo, E., & Palladino, R. (2022). Sustainable entrepreneurship impact and entrepreneurial venture life cycle: A systematic literature review. <i>Journal of Cleaner Production</i> , 378, 134,469
York, J. G., O'Neil, I., & Sarasvathy, S. D. (2016). Exploring environmental entrepreneurship: Identity coupling, venture goals, and stakeholder incentives. <i>Journal of management studies</i> , 53(5), 695–737	York, J. G. (2018). It's getting better all the time (can't get no worse): The why, how and when of environmental entrepreneurship. <i>International Journal of Entrepreneurial Venturing</i> , 10(1), 17–31	Fischer-Kreer, D., & Brettel, M. (2022). Accentuate the positive? Sustainable entrepreneurs' framing of positive and negative impacts. <i>Journal of Cleaner Production</i> , 376, 134,319
Fischer, D., Mauer, R., & Brettel, M. (2018). Regulatory focus theory and sustainable entrepreneurship: International Journal of Entrepreneurial Behavior & Research, 24(2), 408–428	Sarasvathy, S. D., & Ramesh, A. (2019). An effectual model of collective action for addressing sustainability challenges. <i>Academy of management perspectives</i> , 33(4), 405–424	Hirschmann, M., & Block, J. H. (2022). Trademarks and how they relate to the sustainability and economic outcomes of social startups. <i>Journal of cleaner production</i> , 376, 134,320
Hanohov, R., & Baldacchino, L. (2018). Opportunity recognition in sustainable entrepreneurship: an exploratory study. <i>International Journal of Entrepreneurial Behavior & Research</i> , 24(2), 333–358	O'Shea, G., Farny, S., & Hakala, H. (2021). The buzz before business: A design science study of a sustainable entrepreneurial ecosystem. <i>Small Business Economics</i> , 56(3), 1097–1120	Karahana, M., Rashid, L., & Kratzer, J. (2022). Gearing-up for purpose: The relationship between entrepreneurs' usage of incubation support services and sustainable impacts. <i>Journal of Cleaner Production</i> , 377, 134,315
Jasniak, M., Ermakova, T., Baiert, R., & Halberstadt, J. (2018). What drives social entrepreneurial appraisal among hearing-impaired individuals? <i>International Journal of Entrepreneurial Venturing</i> , 10(2), 236–255	Piterou, A., & Coles, A. M. (2021). A review of business models for decentralised renewable energy projects. <i>Business Strategy and the Environment</i> , 30(3), 1468–1480	Neumann, T. (2022). Impact of green entrepreneurship on sustainable development: An ex-post empirical analysis. <i>Journal of Cleaner Production</i> , 377, 134,317
Spiegler, A. B., & Halberstadt, J. (2018). SHEstainability: How relationship networks influence the idea generation in opportunity recognition process by female social entrepreneurs. <i>International Journal of Entrepreneurial Venturing</i> , 10(2), 202–235	Ridley-Duff, R., & Bull, M. (2021). Common pool resource institutions: The rise of internet platforms in the social solidarity economy. <i>Business Strategy and the Environment</i> , 30(3), 1436–1453	Strömmer, K., & Ormiston, J. (2022). Forward-looking impact assessment—An interdisciplinary systematic review and research agenda. <i>Journal of Cleaner production</i> , 377, 134,322
Vuorio, A. M., Puimalainen, K., & Fellnhöfer, K. (2018). Drivers of entrepreneurial intentions in sustainable entrepreneurship. <i>International Journal of Entrepreneurial Behavior & Research</i> , 24(2), 359–381	Wagner, M., Schaltegger, S., Hansen, E. G., & Fichter, K. (2021). University-linked programmes for sustainable entrepreneurship and regional development: how and with what impact? <i>Small Business Economics</i> , 56(3), 1141–1158	Audretsch, D. B., Belitski, M., Eichler, G. M., & Schwarz, E. (2024). Entrepreneurial ecosystems, institutional quality, and the unexpected role of the sustainability orientation of entrepreneurs. <i>Small Business Economics</i> , 62(2), 503–522
Wahga, A. I., Blundel, R., & Schaefer, A. (2018). Understanding the drivers of sustainable entrepreneurial practices in Pakistan's leather industry: a multi-level approach. <i>International Journal of Entrepreneurial Behavior & Research</i> , 24(2), 382–407	Birhanu, A. G., Getachew, Y. S., & Lashitew, A. A. (2022). Gender differences in enterprise performance during the COVID-19 crisis: Do public policy responses matter? <i>Entrepreneurship Theory and Practice</i> , 46(5), 1374–1401	Cojoianu, T. F., Hoepner, A. G., Hu, X., Ramadan, M., Veneri, P., & Wójcik, D. (2024). Are cities venturing green? A global analysis of the impact of green entrepreneurship on city air pollution. <i>Small Business Economics</i> , 62(2), 523–540
Lumpkin, G. T., & Bacq, S. (2019). Civic wealth creation: A new view of stakeholder engagement and societal impact. <i>Academy of Management Perspectives</i> , 33(4), 383–404	Laukkanen, M., & Tura, N. (2022). Sustainable value propositions and customer perceived value: Clothing library case. <i>Journal of Cleaner Production</i> , 378, 134,321	

Table 2 (continued)

Why/Antecedents	What/How	Impacts/Consequences
Sarason, Y., & Dean, T. J. (2019). Lost battles, Trojan horses, open gates, and wars won: How entrepreneurial firms co-create structures to expand and infuse their sustainability missions in the acquisition process. <i>Academy of Management Perspectives</i> , 33(4), 469–490	Vimalnath, P., Tietze, F., Jain, A., Gurtsoo, A., Eppinger, E., & Elsen, M. (2022). Intellectual property strategies for green innovations-An analysis of the European Inventor Awards. <i>Journal of Cleaner Production</i> , 377, 134,325	
Bischoff, K. (2021). A study on the perceived strength of sustainable entrepreneurial ecosystems on the dimensions of stakeholder theory and culture. <i>Small Business Economics</i> , 56(3), 1121–1140	Wöhler, J., & Haase, E. (2022). Exploring investment processes between traditional venture capital investors and sustainable start-ups. <i>Journal of Cleaner Production</i> , 377, 134,318	
DiVito, L., & Ingen-Housz, Z. (2021). From individual sustainability orientations to collective sustainability innovation and sustainable entrepreneurial ecosystems. <i>Small Business Economics</i> , 56(3), 1057–1072	Anwar, A., Coviello, N., & Rouziou, M. (2023). Weathering a crisis: A multi-level analysis of resilience in young ventures. <i>Entrepreneurship Theory and Practice</i> , 47(3), 864–892	
Genus, A., Iskandarova, M., & Warburton Brown, C. (2021). Institutional entrepreneurship and permaculture: A practice theory perspective. <i>Business Strategy and the Environment</i> , 30(3), 1454–1467	Backman, M., Hagen, J., Kekezi, O., Naldi, L., & Wallin, T. (2023). In the eye of the storm: entrepreneurs and well-being during the COVID-19 crisis. <i>Entrepreneurship Theory and Practice</i> , 47(3), 751–787	
	Bergenholtz, C., Klyver, K., & Vuculescu, O. (2023). Self-efficacy in disrupted environments: COVID-19 as a natural experiment. <i>Entrepreneurship Theory and Practice</i> , 47(3), 724–750	
	Branzei, O., & Fathallah, R. (2023). The end of resilience? Managing vulnerability through temporal resourcing and resisting. <i>Entrepreneurship Theory and Practice</i> , 47(3), 831–863	
	Browder, R. E., Seyb, S., Forgues, A., & Aldrich, H. E. (2023). Pandemic makers: How citizen groups mobilized resources to meet local needs in a global health crisis. <i>Entrepreneurship Theory and Practice</i> , 47(3), 964–997	
	Caliendo, M., Graeber, D., Kritikos, A. S., & Seebauer, J. (2023). Pandemic depression: COVID-19 and the mental health of the self-employed. <i>Entrepreneurship Theory and Practice</i> , 47(3), 788–830	
	Liu, K., Fu, K., Yang, J. Y., & Al Asady, A. (2023). A system justification theory of entrepreneurial attitudinal change during a crisis. <i>Entrepreneurship Theory and Practice</i> , 47(3), 893–923	

Table 2 (continued)

Why/Antecedents	What/How	Impacts/Consequences
	Mittermaier, A., Patzelt, H., & Shepherd, D. A. (2023). Motivating prosocial venturing in response to a humanitarian crisis: Building theory from the refugee crisis in Germany. <i>Entrepreneurship Theory and Practice</i> , 47(3), 924–963	
	Stephan, U., Zbierowski, P., Pérez-Luño, A., Wach, D., Wiklund, J., Alba Cabañas, M., ... & Zahid, M. M. (2023). Act or wait-and-see? Adversity, agility, and entrepreneur wellbeing across countries during the COVID-19 pandemic. <i>Entrepreneurship Theory and Practice</i> , 47(3), 682–723	
	Khurana, I., & Dutta, D. K. (2024). From place to space: The emergence and evolution of sustainable entrepreneurial ecosystems in smart cities. <i>Small Business Economics</i> , 62(2), 541–569	

on longitudinal datasets (Bergmann and Rychener, 2026; Kotiranta et al., 2026).

Maaßen et al. (2026) use a mixed-method approach that combines in-depth interviews with survey data. They analyze how institutional influences can support or hinder the evolution of sustainable entrepreneurship and highlight the importance of normative institutional pressures.

Likewise, Rychener and Bergmann & Rychener (2026) also address the antecedents of sustainable entrepreneurship. They examine how mission-driven entrepreneurs translate their aspirations into viable operating firms by focusing on the startup activities undertaken during the venture creation process. Drawing on social identity theory, the authors distinguish between discovery-related and exploitation-related activities and analyze how the strength of founders' missionary identity shapes their relationship with firm emergence. Using longitudinal data, the study shows that discovery-oriented activities are particularly critical for mission-driven founders.

Gonzales et al. (2026) investigate how the stringency and evolution of national environmental regulations shape small and medium-sized enterprises' participation in green markets. Drawing on institutional economics and analyzing data across 26 OECD countries, the study shows that in countries with stringent environmental regulations, the relationship between green market participation and increased regulatory stringency exhibits an inverted-U shape, while in countries with less stringent environmental regulations, Gonzales et al. (2026) observe a U-shaped relationship. These findings highlight the importance of regulatory dynamics and institutional context for understanding firms' engagement in green markets.

Capelleras et al. (2026) analyze whether and under what conditions entrepreneurs' growth aspirations are associated with the adoption of environmental actions. Drawing on a multi-level analysis, the authors show that growth-oriented entrepreneurs are more likely to engage in environmentally oriented behaviors, and that this relationship is further strengthened in countries with more stringent environmental regulations.

In contrast to the earlier articles, Zeng et al. (2026) focus on the impact of sustainable entrepreneurship. They investigate the sustainability-related tensions that entrepreneurs encounter as they develop and

Table 3 Articles included in this special issue

Why/Antecedents	What/How	Impacts/Consequences
Maaßen, C.; Lopez, T.; Urbano, D. (2026). Culture over regulation: Institutional dimensions driving sustainable entrepreneurship. <i>Small Business Economics</i>	Capelleras, J.L., Contín-Pilart, I., Larrazza-Kintana, M., & Martín Sánchez, V. (2026). Entrepreneurial growth aspirations and the adoption of environmental actions: The role of regulatory stringency	Gonzalez, M., Bodas Freitas, I. M., & Brieger, S. A. (2026). National environmental regulations and green market participation by SMEs: M. Gonzalez et al. <i>Small Business Economics</i> , 1-28.
Bergmann H., & Rychener, M. (2026). How do Mission-Driven Ventures Emerge? An Investigation of Startup Activities and the Achievement of Regular Sales among Early-stage Everyday Entrepreneurs. <i>Small Business Economics</i>	Gonzalez, M., Bodas-Freitas, I., & Brieger, S.A. (2026). National Environmental Regulations and Green Market Participation by SMEs	Zeng, K.Y, Thapa Karki, S., Brieger, S.A., & Preuss, L. (2026). Navigating competing priorities for societal value creation: Tensions in sustainability-driven enterprises across venture stages

scale sustainability-driven ventures. Using a multiple case study approach, the authors examine how such tensions emerge and evolve across different venture stages. Their findings identify distinct tensions at the individual, organizational, and macro-level context, showing that the salience and nature of these tensions vary over time and carry different implications for impact creation and scaling.

Lastly, Kotiranta et al. (2026) investigate whether and how public innovation funding supports the growth of hybrid enterprises during economic crises, with particular attention to differences across hybrid organizational forms. Using longitudinal data on Finnish SMEs from 2018 to 2022, the authors analyze the moderating role of hybridity in the relationship between public innovation funding and firm growth during the COVID-19 crisis. The findings show that the growth effects of innovation funding vary systematically with enterprises' hybrid orientation, benefiting hybrids with a stronger economic focus while yielding weaker or contrasting effects for socially driven hybrids.

Taken together, analyzing the historical development in the research field along the present and earlier special issues highlights that the sustainable entrepreneurship literature to date provides a coherent, if still incomplete, picture. It has successfully established conceptual clarity, broadly defining the field as the simultaneous pursuit of economic, social, and environmental value creation (Hall, et al., 2010; Shepherd and Patzelt, 2011; Muñoz & Cohen, 2018; Johnson & Schaltegger, 2020). Research has identified a multifaceted set of motivational drivers. The evidence

indicates that alongside profit considerations, factors such as personal values, founder identity, strategic decisions and prevailing institutional trajectories exert a critical and evolving influence over the venture lifecycle (Chistov et al., 2023; Genus, 2021; Parrish, 2010). It has illuminated the variety of business models and governance structures that support sustainability, from hybrid organizations and cooperatives to circular economy sufficiency-driven business models (Bocken & Short, 2016).

5 The way forward

The main question is how the field should proceed from here. For sustainable entrepreneurship to progress from an emerging research area to a field capable of shaping and understanding systemic transformation, scholarship must address several critical and interrelated caveats. *First*, the literature shows an insufficient grasp of the dynamics of scaling and diffusion. Existing research is predominantly grounded in idiosyncratic, context-specific case studies that, despite their depth, provide limited generalizable insights for replicating or expanding successful models. Mechanisms facilitating the broader dissemination of sustainable solutions, such as ecosystem orchestration, institutional entrepreneurship, and the development of transnational partnerships, remain markedly underexplored. Given the primarily qualitative nature of research on scaling sustainable entrepreneurship, further research could aim at

synthesizing these findings using qualitative meta-analyses (Habersang et al., 2019; Habersang & Reihlen, 2025).

Second, beyond the specific aspect of scaling, advancing the research field of sustainable entrepreneurship requires comparative, cross-contextual studies and systematic replication research to delineate the boundary conditions of established findings. The justification of such an approach is based on the belief that single dataset studies may include false positives and that internal replication (more than one data set per study) or external replication (starting a study with an attempt at replicating an earlier one and then extending it) is a superior approach (Block et al., 2023; Van Witteloostuijn et al., 2021). Scientific journals dealing with sustainability issues sometimes seem to focus on new theories. But, as we demonstrated above, the field of sustainable entrepreneurship is not new anymore. Moreover, theory development may be crucial for our understanding of the antecedents and consequences of sustainable entrepreneurship, but this focus can be detrimental to testing if existing theories work in new and different environments or whether a theoretical approach can be further developed using systematic external replications and impact measurements.

Third, a persistent disconnect between analytical levels impedes comprehensive understanding. Micro-level studies focused on founder motivations and venture strategies rarely integrate with macro-level analyses of institutional frameworks and global governance. This compartmentalization obfuscates the recursive relationships by which entrepreneurial agency both influences and is influenced by broader systemic structures. Future research should employ multi-level frameworks to explicitly investigate how grassroots entrepreneurial activity interfaces with multi-level transformations and international policy regimes to foster transformative change (Hörisch, 2015; Johnson & Schaltegger, 2020; Loorbach & Wijsman, 2013).

Fourth, and related to the above research gap on the link between micro-level activities and macro-level outcomes, sustainable entrepreneurship research should focus on demonstrating the impact of sustainable entrepreneurship on sustainable development. The legitimacy of the research field is based on the claim that sustainable entrepreneurship is able to meaningfully contribute to sustainable development.

While this claim is grounded in convincing conceptual arguments (e.g. Hockerts & Wüstenhagen, 2010) and qualitative case studies of impactful sustainable and social entrepreneurs (e.g. Ney et al., 2014), large-scale quantitative studies on the impact of sustainable entrepreneurship will not only increase the maturity of the research field (see Edmonson & McManus, 2008), but also help to legitimize the central claim of the research field.

Fifth, future research on sustainable entrepreneurship from an international perspective should examine how cross-country contextual differences shape the opportunities, constraints, and outcomes of sustainable ventures. Building on the notion of sustainable entrepreneurial ecosystems and the globalization of sustainability aspirations, scholars need to explore how national institutional arrangements, policy regimes, and regulatory climates interact with regional and local ecosystems to foster or hinder sustainable venturing, including the cross-country diffusion of sustainable business models, certifications, and collaborative governance practices. An international lens can illuminate how diverse definitions of sustainability, legitimacy-building processes, and governance logics influence the emergence and scaling of social and impact-oriented ventures, as well as how global value chains, trade policies, and international development agendas shape venture outcomes across contexts. Comparative studies can further unpack how supra-national instruments (e.g., UN SDGs) interact with local social norms, market conditions, and technological trajectories to produce different sustainable outcomes, advancing a more robust, cross-border theory of sustainable entrepreneurship. Methodologically, such efforts will require cross-country case comparisons, longitudinal panel designs, and multi-level global datasets to capture heterogeneity and trace the causal mechanisms through which international linkages foster sustainability-oriented entrepreneurship across developed and developing economies.

Finally, the field is constrained by a lack of methodological diversity. The prevalent reliance on qualitative case studies situated within Western, Educated, Industrialized, Rich, and Democratic (WEIRD) contexts, frequently based on self-reported data, results in an evidence base that is susceptible to success bias and, hence, of limited generalizability. Generally, the field has demonstrated limited engagement with

critical perspectives from neighboring disciplines, including political ecology, ‘degrowth’, and ‘decolonial’ studies. This insularity restricts the capacity of sustainable entrepreneurship scholarship to critically interrogate foundational assumptions such as the centrality of economic growth and to frameworks that address the underlying institutional, ecological, and political-economic drivers of unsustainability (Bruton et al., 2013; De Clercq & Voronov, 2011).

This transformative agenda positions sustainable entrepreneurship not as a peripheral topic, but as central to reimagining economies. To inspire future scholarships, we pose several challenging research issues. Can sustainable entrepreneurship be truly scalable without diluting its ethical foundations? Does the increasing institutionalization of sustainability through certifications and metrics endanger a natural and flexible transformative potential? In what ways do new paradigms of impact measurement reconfigure entrepreneurial ecosystems, and how, in turn, may these ecosystems influence the development of such metrics? And finally, in an era of planetary boundaries, should the field shift its focus from “impact” to “legacy”, the enduring capacity of entrepreneurial activity to regenerate social-ecological systems? By embedding such questions into the research agenda, this special issue aims to stimulate bold, reflexive, and transformative inquiry.

6 Summary

The study of sustainable entrepreneurship has developed considerably since its emergence in the early 2000s. From the initial conceptual foundations that highlighted entrepreneurship’s potential role in addressing market failures and sustainability challenges, the field has evolved into a mature domain concerned with practice, impact, and global engagement. Yet, the literature remains fragmented, overly context-bound, and methodologically limited. To advance knowledge and to address grand challenges, scholars must integrate international perspectives, rigorously measure impact, and explore how entrepreneurial solutions can be scaled up. Well-organized, large-scale collaboration exercises with a strong internal replication set-up are the way forward.

This special issue aims to catalyze such progress. By bringing together contributions that examine the antecedents and impacts of sustainable entrepreneurship across diverse international contexts, we hope to enrich scholarly debates and inform policy and practice. Ultimately, the promise of sustainable entrepreneurship lies not only in the creation of ventures but in the potential transformation of economic and social systems. Advancing research in this domain is therefore both an intellectual imperative and a societal necessity.

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Author contributions All authors whose names appear on the submission made substantial contributions to the conception or design of the work; the acquisition, analysis, or interpretation of previous special issues; revised it critically for important intellectual content; approved the version to be published; and agreed to be accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved.

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Data availability No datasets were generated or analysed during the current study.

Declarations

Competing interests The authors declare no competing interests.

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