Key components, Principles, and Distinctions of Sustainable Entrepreneurship: A narrative synthesis

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Abstract

Sustainable entrepreneurship represents a growing area of research that responds to complex global challenges by integrating environmental, social, and economic aims into entrepreneurial practice. However, a lack of conceptual clarity continues to limit its theoretical development and practical application. This study uses a systematic literature review with a narrative synthesis approach to analyse fourteen peer-reviewed empirical articles published between 1997 and 2024. It explores the key components and guiding principles of sustainable entrepreneurship and how it differs from other forms of entrepreneurship. The findings show that sustainable entrepreneurship is a dynamic and context-sensitive process shaped by entrepreneurial identity, stakeholder collaboration, and structural conditions. It is characterised by the pursuit of integrated value creation across the triple bottom line. This review contributes to theory by clarifying the key components and guiding principles that define sustainable entrepreneurship and by distinguishing it from other forms of entrepreneurship.

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Attestation of Authorship

I hereby declare that this submission is my own work and that, to the best of my knowledge and belief, it contains no material previously published or written by another person (except where explicitly defined in the acknowledgements), nor material which to a substantial extent has been submitted for the award of any other degree or diploma of a university or other institution of higher learning. Artificial intelligence tools were used in a minor capacity to support language refinement. All intellectual content, analysis, and interpretation are my own.

Author's Signature:

Prarichat Souksamlane

Date: 13 November 2025

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Chapter 1 Introduction

1.1 The Emergence of Sustainable Entrepreneurship

Sustainable entrepreneurship (SE) has emerged as a significant field of academic interest. It offers practical solutions to major global challenges, including climate change, inequality, and economic instability. SE is generally understood as an approach that combines entrepreneurial activity with a commitment to achieving environmental, social, and financial sustainability (Cohen et al., 2008; Muñoz & Dimov, 2015; Shepherd & Patzelt, 2011). This approach is closely aligned with the United Nations Sustainable Development Goals (UN SDGs) and broader global efforts to promote responsible and inclusive development (Crecente et al., 2021; Mio et al., 2020). The UN SDGs serve as a global framework to address major challenges by encouraging economic growth, environmental protection, and improvements in quality of life. They are important because they promote collaboration across sectors to build a more equal and sustainable world. Responsible and inclusive development refers to ensuring that all people, including those from disadvantaged or underrepresented groups, benefit from progress. This approach helps reduce inequality and supports sustainable business practices that contribute to lasting social and environmental improvements (Crecente et al., 2021; Mio et al., 2020).

Given its alignment with these global objectives, it is essential to explore both the theoretical underpinnings and practical applications of SE. In recent years, SE has attracted growing interest across several academic disciplines, including entrepreneurship, environmental studies, international business, and management (Terán-Yépez et al., 2020). In entrepreneurship, international business, and management studies, SE broadens the purpose of entrepreneurial activity beyond profit-making to include social and environmental value creation. It also introduces new business models and leadership practices that align with global sustainability goals (Rosário et al., 2022; Terán-Yépez et al., 2020). In the context of environmental studies, SE contributes by offering practical and innovative solutions to ecological problems through the use of green technologies and systemic approaches,

positioning entrepreneurs as key agents in promoting long-term environmental resilience and sustainable development (Rosário et al., 2022).

SE literature began emerging in the late 1990s, marking the start of its ongoing development, with scholars still debating its foundational definitions and key characteristics (Ali, 2021). The early 2000s saw a growing focus on the intersection of entrepreneurship, sustainability, and corporate social responsibility. By 2006, the integration of sustainability with traditional entrepreneurship theories gained significant traction (Anand, 2021; Rosario et al., 2022). Today, SE is broadly recognised as an approach that integrates environmental, social, and economic objectives into business practices (Ali, 2021). For example, Sarango-Lalangui et al. (2018) describe SE as an approach that aims to align sustainability with economic objectives. This integration is often illustrated through frameworks like the Triple Bottom Line (TBL), which considers environmental protection, social well-being, and economic performance as core dimensions of sustainable business activity (Parrish & Foxon, 2006). In short, SE involves incorporating sustainability into entrepreneurial practices by addressing environmental, social, and economic goals within the business model.

Despite growing interest, the field of SE remains fragmented. Much of the existing literature is conceptual or normative, with limited empirical research on how SE functions in practice (Cohen et al., 2008; Shepherd & Patzelt, 2011). Scholars have consistently called for greater definitional clarity to advance theory-building and support empirical inquiry (Pacheco et al., 2010; Cohen & Winn, 2007; Schaltegger & Wagner, 2011). A shared understanding is viewed as essential for analysing SE's mechanisms, evaluating its outcomes, and distinguishing it from related forms of entrepreneurship. More recently, several studies have reinforced this call. Katsikis and Kyrgidou (2007) emphasise the need for a unified and operational definition to guide both research and practice. The lack of conceptual consistency has led to blurred theoretical boundaries, inconsistent terminology, and limited cumulative knowledge (Gast et al., 2017; Terán-Yépez et al., 2020). These issues also restrict the development of coherent policy frameworks and practical implementation (Pinkse & Groot, 2015). In response, Zhang et al. (2024) advocate for empirical indices that capture SE's integrated objectives, while Islam

and Mehdi (2024) propose a conceptual model linking climate awareness and SE, underlining the need for further empirical validation.

1.2 Sustainable Entrepreneurship and Other Entrepreneurship Forms

SE shares several features with other forms of entrepreneurship, including commercial, social, and environmental entrepreneurship. However, it also presents distinct characteristics that require clearer differentiation to avoid confusion between concepts and help build clearer theories (Hall et al., 2010; Shepherd & Patzelt, 2011). Commercial entrepreneurship mainly focuses on making a profit and often sees social or environmental concerns as secondary unless they contribute to competitive advantage (Zeng, 2018). In contrast, social and environmental entrepreneurship go beyond financial goals by focusing on social impact or ecological sustainability, respectively (Schaper, 2002; Majid & Koe, 2012). While both contribute to aspects of sustainable development, they typically emphasise only one or two dimensions of the TBL, such as helping communities or protecting the environment.

SE is characterised by its commitment to integrating all three dimensions of the triple bottom line: economic viability, social responsibility, and environmental sustainability (Schaltegger & Wagner, 2011; Shepherd & Patzelt, 2011). This simultaneous focus distinguishes SE from other entrepreneurial forms, such as commercial, social, or environmental entrepreneurship, which typically prioritise only one or two of these pillars. Schaltegger and Wagner (2011) explicitly compare these models and highlight SE's holistic approach, while Shepherd and Patzelt (2011) note the conceptual overlap between SE and both social and environmental entrepreneurship, underscoring the need for clearer distinction. Despite these differences, SE is often confused with related approaches, such as social entrepreneurship and environmental entrepreneurship, because they all emphasise creating positive impact beyond profit. Despite these differences, these approaches share similar values, including ethical practices, long-term sustainability, and a commitment to addressing social or ecological challenges. In addition, their mission-driven nature, where goals include both financial

performance and broader societal or environmental benefits, contributes to this confusion (Dixon & Clifford, 2007; Holt, 2011). This ambiguity reinforces the need for further empirical investigation to clarify SE's unique characteristics and support its theoretical development.

Several scholars have highlighted the problem of unclear definitions in the SE field. Scholars point out that without a clear definition, SE risks being seen as a general type of entrepreneurship, which reduces its value for both research and practice (Thompson et al., 2011; Schaltegger & Wagner, 2011; Dean & McMullen, 2007). Inconsistent use of the term across studies also makes it harder to build a shared understanding (Lans et al., 2014; Gast et al., 2017). This lack of clarity makes it difficult to compare research findings and slows down the progress of theory development (Hall et. al., 2010). A clearer definition would allow researchers to study SE more effectively and would help policymakers, educators, and investors support truly sustainable ventures (Greco & Jong, 2017). Therefore, setting clear boundaries is important not only for academic purposes but also for improving decision-making and practical support in the real world.

1.3 The Multi-Level Approach to Sustainable Entrepreneurship

To provide a comprehensive understanding of SE this study adopts a multi-level approach, examining SE at the individual, organisational, and societal levels. A multi-level approach is a framework that examines phenomena across different levels of analysis within organisations, capturing the complex interactions and relationships among individuals, organisations, and external environments (Klein & Kozlowski, 2000). This approach enhances the understanding of social dynamics by integrating both individual and macro-level factors, offering a broader perspective on organisational behaviour and decision-making (Pettigrew et al., 2001). Furthermore, it helps avoid common research limitations, ensures that findings are more applicable to real-world contexts, and supports the development of more effective policy interventions and business strategies tailored to specific community needs (Pettigrew et al., 2001). Recognising that sustainable entrepreneurial processes are shaped by a combination of personal motivations, business strategies, and institutional environments (Halberstadt et al., 2024), a

multi-level approach enables a more nuanced exploration of the diverse factors that influence SE. Similarly, Anand (2021) also emphasises that incorporating individual, organisational, and societal perspectives is essential for gaining a comprehensive understanding of SE's impact and its unique characteristics.

At the individual level, it is crucial to understand how personal characteristics, motivations, and experiences influence entrepreneurial decision-making and performance within organisations (Klein & Kozlowski, 2000; Pettigrew et al., 2001). According to Belz and Binder (2017), entrepreneurial knowledge, sensitivity to sustainability issues, and personal values play a significant role in shaping sustainable business strategies. Additionally, scholars emphasise the importance of examining how entrepreneurs recognise, evaluate, and exploit opportunities that align with sustainability objectives (Thompson et al., 2011). Therefore, this review explores the personal traits, motivations, and opportunity recognition of sustainable entrepreneurs, as these elements influence their ability to address economic, social, and environmental goals effectively.

At the organisational level, the focus shifts to understanding how businesses integrate sustainability into their strategies, policies, structures, and operations. Klein and Kozlowski (2000) and Pettigrew et al. (2001). suggest that organisations should be analysed as a whole, including their internal culture, leadership approaches, and business models. Sustainable enterprises often face significant challenges, including institutional barriers, market constraints, and economic pressures, which can hinder their long-term viability (Rosário et al., 2022; Schaltegger & Wagner, 2011). To overcome these challenges, businesses must adopt strategic sustainability practices that align profitability with environmental and social responsibility. Thus, this review aims to explore how businesses develop and implement sustainability strategies, including stakeholder engagement, innovation, and sustainable business models that ensure long-term success.

At the societal level, SE is analysed within the broader external environment, encompassing factors such as market conditions, social influences, and regulatory frameworks that impact organisational functioning (Klein & Kozlowski, 2000; Pettigrew et al., 2001). For SE ventures, traditional institutional structures often

favour conventional business models, creating obstacles in securing policy support, accessing funding, and gaining market legitimacy (Hoogendoorn et al., 2019). However, SE plays a crucial role in societal transformation, as it promotes responsible business practices and drives the transition toward sustainability-focused economies (Anand, 2021). As such, this review examines SE within its broader institutional and regulatory contexts, including policy frameworks, market dynamics, and socio-economic conditions that influence the adoption and growth of sustainable business models.

Therefore, by employing a multi-level approach, this study provides a holistic understanding of SE, capturing its complexity across different dimensions. Examining SE at the individual, organisational, and societal levels allows for a deeper analysis of the factors influencing its success and the systemic challenges it faces. This approach offers valuable insights for policymakers, entrepreneurs, and researchers, helping them develop effective strategies to foster sustainable business ecosystems.

1.4 Research Objectives

Given the conceptual ambiguity and lack of cumulative empirical knowledge in SE literature, this study aims to provide a comprehensive understanding of SE by identifying its key components, guiding principles, and distinctive features. The study is guided by the following research questions:

1. What are the key components and guiding principles that define sustainable entrepreneurship across individual, organisational, and societal levels?
2. How is sustainable entrepreneurship distinct from other forms of entrepreneurship in terms of its objectives, processes, and outcomes?

To answer these questions, this study employs a systematic literature review, which offers a transparent and rigorous method for synthesising empirical evidence in response to specific research questions (Tranfield et al., 2003). It adopts Briner and Denyer's (2012) narrative synthesis approach, which enables the interpretation of findings by identifying and integrating common themes across studies. The dissertation is organised as follows: Chapter 2 details the research

design, including the review strategy, study selection, and data analysis procedures. Chapter 3 outlines the key findings, grouped into individual, organisational, and societal levels. Chapter 4 discusses these insights in relation to the research questions and theoretical frameworks. Chapter 5 concludes the study, highlighting its main contributions, implications, and areas for future research.

Chapter 2 Methodology

This chapter outlines the research methodology. It introduces the systematic literature review methodology and explains why this approach best serves the research objectives. Following this, it presents narrative synthesis as a suitable type of systematic literature review to select and analyse relevant articles. The chapter then details each step of how the research progresses through data collection, analysis, and synthesis.

Systematic Literature Review: Narrative Synthesis

This study adopts a systematic literature review to explore the current state of knowledge on sustainable entrepreneurship and to answer the research questions. A systematic review is a transparent and structured approach to identifying, evaluating, and synthesising existing research. It follows clearly defined steps to minimise bias and ensure the reliability of findings (Tranfield et al., 2003; Grant & Booth, 2009). This method involves a comprehensive search across a wide range of sources, including academic databases, conference proceedings, and grey literature. All selected studies are critically appraised to ensure relevance and research quality (Kitchenham et al., 2009; Briner & Denyer, 2012). Systematic reviews have been widely recognised as an effective methodology for drawing conclusions from diverse bodies of literature. They are especially suitable for qualitative research that seeks to interpret and connect findings from multiple perspectives (Dixon-Woods et al., 2005). This approach has been applied successfully in several fields, including medicine (Harris et al., 2013; Brothers et al., 2023), agriculture (Ismail et al., 2021), sport sciences (Benoit-Piau et al., 2023), and business research (Lorenzo-Afable et al., 2023; Sánchez González et al., 2010). In the context of sustainable entrepreneurship, the systematic review allows the researcher to organise a large volume of information and identify both areas of agreement and disagreement in the literature.

To synthesise the findings from the selected studies, this review applies a narrative synthesis approach. Narrative synthesis is a method used to bring together results from studies that may differ in design, focus, or context (Hammersley, 2001).

Rather than using statistical techniques, this method involves summarising, interpreting, and linking the findings to reveal broader themes, trends, and conceptual relationships (Hammersley, 2001; Popay et al., 2006). It is especially suitable for complex and evolving topics like sustainable entrepreneurship, where different stakeholder perspectives and contextual influences are important to consider (Rosário et al., 2022; Terán-Yépez et al., 2020). Narrative synthesis is recognised as a flexible and useful approach for management and social science research (Briner & Denyer, 2012). It helps to build a clearer picture of how studies contribute to theoretical understanding, such as the direction or strength of certain relationships, or the role of specific factors in shaping outcomes (Briner & Denyer, 2012; Snyder, 2019). This method also enables the researcher to be reflexive and critical in identifying connections and gaps in the literature, and to develop insights that may not be visible when studies are viewed in isolation (Denyer & Tranfield, 2009).

In what follows, this review applies the five-stage procedure proposed by Briner and Denyer (2012) to guide the narrative synthesis of empirical literature on the definition of sustainable entrepreneurship. These steps include planning and scoping the review, locating studies using multiple databases and keywords, selecting and evaluating the studies based on quality and relevance, synthesising the evidence to identify themes and conceptual patterns, and presenting the findings. Each of these stages is outlined in detail as follow:

2.1 Planning and Scoping

This review is guided by two research questions: What is sustainable entrepreneurship? How does sustainable entrepreneurship differ from other of forms of entrepreneurship? These questions aim to explore the complexity of SE and better understand its key features. To support a clear and structured research design, the study uses the CIMO framework (Context, Intervention, Mechanism, Outcome), developed by Denyer and Tranfield (2009). This framework helped define which studies were relevant to include in the review. In terms of context, the review focused on businesses that make sustainability a core part of their strategy, rather than those that only carry out small or short-term sustainability projects. For

interventions, the review included studies that looked at specific actions taken by entrepreneurs or businesses to achieve sustainability, such as ethical sourcing or working closely with stakeholders. Mechanisms referred to the internal factors that support these actions, such as leadership, innovation, and efficient resource use. Outcomes were the results of these efforts, including social, environmental, or financial impact. Using this framework made it easier to select and assess relevant studies.

To carry out the scoping process, a systematic search was conducted using two databases: Scopus and Emerald insight. These databases were chosen based on recommendations from the university librarian and guidance from the research supervisor. Scopus was chosen for its reliability and ability to effectively organize scientific articles and makes it simple to obtain specific information such as journal rankings, citations, authors, and research areas (Kipper et al., 2020). In addition, because Google Scholar has a boarder coverage than those two databases (Moed et al., 2016), it also offers a means for verifying search results to guarantee a full investigation. The review included only peer-reviewed journal articles written in English and published between 1997 and June 2024, starting from the period when sustainable entrepreneurship began to emerge as a recognised academic concept (Ali, 2021). The following outlines the inclusion criteria for this research:

- Empirical studies on sustainable entrepreneurship
- English language only
- Peer-reviewed published studies
- Business studies only
- Journal ranking 3, 4, and 4* in CABS
- Studies that are relevant to research questions
- Studies published between 1997 - June 2024

2.2 Locating the Studies

The search strings used in this study are: "Sustainable entrepreneur*" OR "Sustainable business*" OR "Sustainable venture*" OR "green entrepreneur*" OR "green business*" OR "green venture*" OR "ecopreneur*." These terms were carefully chosen to reflect how sustainable entrepreneurship is described in the

literature based on earlier literature scoping. The keyword "sustainable" formed the foundation, while the asterisk (*) was added to "entrepreneur*" to include variations of the word in the results. Additionally, synonyms like "venture," "enterprise," and "business" were incorporated, as these terms are commonly used interchangeably in entrepreneurship research to describe the creation and growth of new ventures (Carlsson et al., 2013; Gartner, 1985).

Additionally, previous studies reveal overlapping terminology, such as "sustainable entrepreneurship," "ecopreneurship," and "green entrepreneurship," which are often used to describe similar concepts (Holt, 2011; Dixon & Clifford, 2007; Cohen & Winn, 2007). For example, ecopreneurship focuses on reducing environmental impact while maintaining profitability (Pastakia, 1998; Schaper, 2002). By using broad search terms, this study aimed to capture a wide range of relevant research on sustainable entrepreneurship and its various dimensions. The search, focused on titles, abstracts, and key phrases, with results limited to works published between 2007 and June 2024. As a result, 998 articles were discovered, 556 of which were from Scopus and 442 from Emerald Insight.

2.3 Critically Appraise the Studies

In this step, the author carefully filtered and evaluated the studies based on the inclusion and exclusion criteria. The initial search across Scopus and Emerald Insight returned 998 articles. After removing 30 duplicate records, 968 articles remained. The first round of screening excluded non-peer-reviewed publications, such as books and conference papers, which reduced the number to 572 articles. The second round removed studies that were not related to the research focus, such as those from fields such as environmental sciences and education; leaving 298 articles. According to Paul et al. (2021), the Chartered Association of Business Schools Academic Journal Guide 2021 (CABS, AJG2021) is a widely used and trusted source for identifying high-quality journals in the field of business. It provides a consistent and expert-reviewed ranking system. Based on this guide, the third round of screening applied the AJG2021 ranking criteria to the 298 initially identified articles. Of these, 240 were published in journals ranked below 3 and were excluded. The remaining 58 articles, all from journals ranked 3 or above, were

retained for further review. Finally, abstracts and full texts were then assessed to determine whether the studies focused on the full operation of sustainable entrepreneurship, rather than isolated practices, training programmes, or partial sustainability initiatives within other entrepreneurship forms. This screening reduced the total to 14 articles that directly addressed the core concept of sustainable entrepreneurship. The final selection was reviewed by the research supervisor to ensure alignment with the study's objectives and research questions. These 14 studies provide robust and relevant empirical evidence for the review. A summary of the included studies is provided in Table 1.

Table 1. Articles that meet the selection criteria.

Author	Title	Year	Journal	AJG 2021 (CABS) ranking
Allal-Chérif, O., Costa Climent, J., & Berenguer, K. J. U.	Born to be sustainable: How to combine strategic disruption, open innovation, and process digitization to create a sustainable business	2023	Journal of Business Research	3
Bergset L.	Green start-up finance – where do particular challenges lie?	2018	International Journal of Entrepreneurial Behaviour and Research	3
Botelho, T., Mason, C., Chalvatzis, K.	50 Shades of green—Angel investing in green businesses	2023	IEEE Transactions on Engineering Management	3
Chen, S., Shen, W., Qiu, Z., Liu, R., Mardani, A.	Who are the green entrepreneurs in China? The relationship between entrepreneurs' characteristics, green entrepreneurship orientation, and corporate financial performance	2023	Journal of Business Research	3
Cui, L., Chan, H. K., Zhou, Y., Dai, J., Lim, J. J.	Exploring critical factors of green business failure based on Grey-Decision Making Trial and Evaluation Laboratory (DEMATEL)	2019	Journal of Business Research	3
Fischer, D., Mauer, R., Brettel, M.	Regulatory focus theory and sustainable entrepreneurship	2018	International Journal of Entrepreneurial	3

			Behaviour and Research	
Gasbarro, F., Rizzi, F., Frey, M.	Sustainable institutional entrepreneurship in practice Insights from SMEs in the clean energy sector in Tuscany (Italy)	2018	International Journal of Entrepreneurial Behaviour and Research	3
Godley, A.	Green entrepreneurship in UK foods and the emergence of the alternative meat sector: Quorn 1965–2006	2024	Business History	4
Gunawan, A. A., Essers, C., van Riel, A. C. R.	The adoption of ecopreneurship practices in Indonesian craft SMEs: value-based motivations and intersections of identities	2021	International Journal of Entrepreneurial Behaviour and Research	3
Hanohov, R., Baldacchino, L.	Opportunity recognition in sustainable entrepreneurship: an exploratory study	2018	International Journal of Entrepreneurial Behaviour and Research	3
Kirkwood, J., & Walton, S.	What motivates ecopreneurs to start businesses?	2010	International Journal of Entrepreneurial Behaviour and Research	3
Kutlu, G., & Ngoasong, M. Z.	A framework for gender influences on sustainable business models in women's tourism entrepreneurship: doing and re-doing gender	2024	Journal of Sustainable tourism	3
Muñoz, P.	A cognitive map of sustainable decision-making in entrepreneurship A configurational approach	2018	International Journal of Entrepreneurial Behaviour and Research	3
Yacoub, G., Mitra, P., & Ratinho, T.	Sustainable entrepreneurs: what drives them to engage in different crowdfunding types?	2022	International Journal of Entrepreneurial Behaviour and Research	3

2.4 Analyse and Synthesise the Findings

Following Saldana (2013), the coding process in this study was conducted in three stages: structural coding, theming the data, and pattern coding. In the first stage, structural coding was applied to organise the data in line with the study's central research questions. Structural coding was particularly useful for identifying initial categories and establishing analytic direction early in the review process

(Saldana, 2013). This approach allowed the author to link segments of raw data with specific aspects of the research focus, helping to map relevant findings across the included studies (Saldana, 2013). Through this stage, a total of 58 unique codes were generated from the selected articles.

The second stage involved theming the data. Theming refers to the act of identifying and grouping together related codes that express similar meanings, actions, or concepts into broader, more abstract categories known as themes. This step enables researchers to interpret the underlying patterns across a dataset by consolidating individual observations or ideas into higher-order concepts that represent key dimensions of the research focus (Saldana, 203). This step enables researchers to move beyond listing individual codes by clustering related insights into broader themes that reflect the key dimensions of the phenomenon under study. For example, the theme "Characteristics of Sustainable Entrepreneurs" includes codes such as ethical values, innovation-driven mindset, adaptability, continuous learning, and long-term vision. In total, 58 codes were synthesised into 10 core themes. These are presented in Table 2.

In the final stage, pattern coding was used as the second cycle of analysis to refine the thematic structure and link the findings to the broader research objectives. Pattern coding is a method used to organise emerging themes into smaller, more meaningful insights (Saldana, 2013). Pattern coding enables the researcher to group themes into more abstract constructs, allowing for a clearer interpretation of complex qualitative data (Saldana, 2013). In this study, the pattern coding process was guided not only by the review questions, "What is sustainable entrepreneurship?" and “How does sustainable entrepreneurship differ from other of forms of entrepreneurship?” but also by the multi-level analytical framework proposed by Klein and Kozlowski (2000). Specifically, the ten emergent themes were organised into three higher-order categories that reflect the individual, organisational, and societal levels at which sustainable entrepreneurship operates. See table 3 for an overview of the patterns and associated themes

Table 2. Themes and corresponding codes

Themes	**Codes**

Characteristics of sustainable entrepreneurs	Ethical values; Flexibility; Adaptability; Resilience; Innovation-driven mindset; Entrepreneurial creativity; Continuous learning; Long-term vision, Personal Background (e.g. gender, experience, education); Market responsiveness
SE: Motivation	Environmental concern; Social justice; Financial sustainability; Autonomy and independence; Moral responsibility; Religious or cultural values; Desire for meaningful work; Value alignment; Ethical values
SE: Opportunity recognition	Community engagement; Market exposure; Personal Background (e.g. gender, experience, education);Awareness of sustainability issues; Identification of unmet needs; Anticipation of market trends; Sustainability values alignment
Alternative funding strategies	Business angels; Self-funding; Crowdfunding; Sustainable investors; Mission-aligned investment; Avoidance of traditional investors; Access to capital
Brand Identity	Stakeholder trust; Credibility and legitimacy; Community-based branding; Educational engagement; Social media presence; Transparent communication

Table 2 Continued.

Themes	**Codes**
Innovation and technology	Eco-friendly product design; Technological experimentation; Resource efficiency; Low-carbon solutions; Innovation for differentiation; Market responsiveness

Collaborative strategies	Internal teamwork; Cross-sector partnerships; Stakeholder co-creation; Regulatory engagement; Knowledge-sharing; Political networking
Barriers to SE	Lack of regulatory support; Policy inconsistency; Investor scepticism; Market unfamiliarity; Skills gap; Green technology limitations; Institutional misalignment
Market acceptance	Green consumer demand; Ethical consumerism; Brand–values alignment; Trust-based relationships; Sustainability communication
Impacts	Environmental preservation; Community empowerment; Green job creation; Local economic development; Behavioural change; Ethical business practice; Financial resilience

Table 3. Patterns and associated themes

Patterns	Themes	Descriptions
Individual Level	Characteristics of sustainable entrepreneurs	This theme focuses on the personal traits and abilities that influence how entrepreneurs engage with sustainability.
	SE: Motivation	Motivations refer to the internal and external factors that drive entrepreneurs to pursue sustainability. These may include environmental concerns, personal values, or financial needs.
	SE: Opportunity recognition	This theme examines how sustainable entrepreneurs identify market or social gaps that align with sustainability goals. It highlights the role of awareness, local knowledge, and responsiveness to emerging needs.
Organisational Level	Alternative funding strategies	Due to limited access to traditional finance, sustainable entrepreneurs turn to creative funding methods such as crowdfunding, self-funding, and support from impact investors. These sources help them stay true to their values and build authentic ventures.
	Brand Identity	SE use branding not just for promotion but to communicate their values, build trust with stakeholders, and show transparency in their practices.
	Innovation and technology	This theme shows how sustainable entrepreneurs use innovation and green technologies to create eco-friendly products and services. These efforts improve efficiency, reduce costs, and help meet environmental goals while staying competitive.

(Continued)

Table 3. Continued

Patterns	Themes	Descriptions
	Collaborative strategies	This theme presents partnerships and stakeholder collaboration. These collaborations support resource-sharing, innovation, and credibility.
Societal Level	Barriers to SE	This theme identifies key challenges such as unclear regulations, limited investor confidence, market unfamiliarity, and a lack of skills or technology. These barriers show the need for better support and stronger policies.
	Market acceptance	This theme explores how value-driven consumers are increasingly supporting sustainable brands. Transparency, ethical practices, and alignment with consumer values drive loyalty and market growth.
	Impacts	This theme refers to the contributions of sustainable entrepreneurship, highlighting its impact on both social and economic change.

2.5 Disseminate the Review Findings

This review will be deposited in the Auckland University of Technology (AUT) Library repository to make the findings accessible to scholars, students, and practitioners interested in sustainability, entrepreneurship, and innovation. By contributing to an evidence-based understanding of sustainable entrepreneurship, the review aims to support future research, guide policymaking, and inform entrepreneurship education and support systems that promote more inclusive and sustainable business ecosystems.

To maximise academic impact, the study is also targeted to be published as a journal article. Potential publication outlets include the *Entrepreneurship Research Journal*, which supports interdisciplinary research on entrepreneurship's role in fostering social, environmental, and economic change. Other suitable journals

include the *Journal of Cleaner Production* and *Business Strategy and the Environment*, both of which regularly publish research on sustainable business practices and are cited in this review.

Chapter 3 Findings

Overview of Included Articles

This review describes findings from 14 studies. Of these, 10 studies employed a qualitative approach, three utilised mixed methods, and one applied a quantitative methodology. Among the 10 qualitative studies, the case study method was predominantly used, with eight involving multiple case studies and two focusing on single case studies. The qualitative methods included semi-structured interviews, document analysis, archival data analysis, observation, and media analysis of social media posts, websites, and press reports. Ten studies were conducted in developed countries, including the USA, Finland, Germany, Sweden, the UK, Italy, New Zealand, France and North American. Four studies were carried out in developing countries, namely China, Indonesia, and Turkey. This section delineates the key patterns identified through the narrative synthesis, which are summarised in Table 4 alongside the corresponding review articles.

Table 4. Themes and associated review articles

Patterns	Themes	Associated Review Articles
Individual Level	Characteristics of sustainable entrepreneurs	Allal-Chérif et al., 2023; Bergset, 2018; Chen et al., 2023; Cui et al., 2019; Fischer et al., 2018; Gasbarro et al., 2018; Godley, 2024; Gunawan et al., 2021; Hanohov & Baldacchino, 2018; Kirkwood & Walton, 2010; Kutlu & Ngoasong, 2024; Muñoz, 2018; Yacoub et al., 2022
	SE: Motivation	Allal-Chérif et al., 2023; Bergset, 2018; Botelho et al., 2023; Fischer et al., 2018; Godley, 2024; Gunawan et al., 2021; Hanohov & Baldacchino, 2018; Kutlu & Ngoasong, 2024; Muñoz, 2018.
	SE: Opportunity recognition	Allal-Chérif et al., 2023; Fischer et al., 2018; Godley, 2024;

		Hanohov & Baldacchino, 2018; Kirkwood & Walton, 2010; Muñoz, 2018.
Organisational Level	Alternative funding strategies	Bergset, 2018; Botelho et al., 2023; Chen et al., 2023; Fischer et al., 2018; Godley, 2024; Kutlu & Ngoasong, 2024; Yacoub et al., 2022.
	Brand Identity	Allal-Chérif et al., 2023; Gasbarro et al., 2018; Godley, 2024; Gunawan et al., 2021; Hanohov & Baldacchino, 2018; Kirkwood & Walton, 2010; Kutlu & Ngoasong, 2024.
	Innovation and technology	Allal-Chérif et al., 2023; Bergset, 2018; Cui et al., 2019; Fischer et al., 2018; Gasbarro et al., 2018; Godley, 2024; Gunawan et al., 2021; Hanohov & Baldacchino, 2018; Kutlu & Ngoasong, 2024; Muñoz, 2018.
	Collaborative strategies	Allal-Chérif et al., 2023; Fischer et al., 2018; Gasbarro et al., 2018; Godley, 2024; Gunawan et al., 2021; Hanohov & Baldacchino, 2018; Kirkwood & Walton, 2010; Kutlu & Ngoasong, 2024; Muñoz, 2018.
Societal Level	Barriers to SE	Allal-Chérif et al., 2023; Bergset, 2018; Cui et al., 2019; Gasbarro et al., 2018; Godley, 2024; Gunawan et al., 2021; Hanohov & Baldacchino, 2018; Yacoub et al., 2022.
	Market acceptance	Allal-Chérif et al., 2023; Chen et al., 2023; Godley, 2024; Muñoz, 2018.
	Impacts	Allal-Chérif et al., 2023; Chen et al., 2023; Fischer et al., 2018; Gasbarro et al., 2018; Godley, 2024; Gunawan et al., 2021; Hanohov & Baldacchino, 2018; Kutlu & Ngoasong, 2024.

Narrative Synthesis: Findings

This section presents the findings of the narrative synthesis conducted through a systematic literature review. The synthesis addresses the nature of sustainable entrepreneurship, and the three overarching patterns were organised using a multi-level framework to explain sustainable entrepreneurship at the individual, organisational, and societal levels.

3.1 Individual Level: Sustainable Entrepreneurs

At the individual level, sustainable entrepreneurship is shaped by the characteristics, motivations, and opportunity recognition of sustainable entrepreneurs. This section examines how entrepreneurial characteristics, including personal traits, ethical values, and backgrounds, shape decision-making in sustainable entrepreneurship. It examines the motivations driving sustainable entrepreneurs, ranging from environmental and social concerns to financial sustainability and personal values. Finally, the findings emphasise opportunity recognition, explaining how entrepreneurs identify and act on sustainability-driven market gaps. Together, these aspects of sustainable entrepreneurs provide a deeper understanding of the entrepreneurial mindset and the factors that enable individuals to create impactful and responsible business ventures.

3.1.1 Characteristics of Sustainable Entrepreneurs

The review sheds light on the defining characteristics of sustainable entrepreneurs, emphasising a diverse range of traits and backgrounds that influence their business decisions. Traits, which refer to inherent qualities, play a crucial role in addressing sustainability challenges, fostering innovation, and achieving long-term success (Allal-Chérif et al., 2023; Kirkwood & Walton, 2010; Kutlu & Ngoasong, 2024; Hanohov & Baldacchino, 2018; Muñoz, 2018). Central to these traits are ethical values (Kirkwood & Walton, 2010; Kutlu & Ngoasong, 2024; Muñoz, 2018), a commitment to capacity development (Allal-Chérif et al., 2023; Hanohov & Baldacchino, 2018. In contrast, backgrounds, such as age, gender (Chen et al., 2023; Gunawan et al., 2021; Kutlu & Ngoasong, 202), education, and work experience (Chen et al., 2023; Hanohov & Baldacchino, 2018; Muñoz, 2018), further shape the approaches and strategies of sustainable entrepreneurs.

Ethical values play a pivotal role in shaping opportunity recognition, guiding product development, informing operational decisions, and fostering ethical partnerships in sustainable entrepreneurial decision-making. During the pre-entry stage, these values guide entrepreneurs in identifying sustainability-focused opportunities, such as addressing environmental challenges, accessing resources, and creating long-term societal impact (Kirkwood & Walton, 2010; Kutlu & Ngoasong, 2024; Muñoz, 2018). Sustainable entrepreneurs focus on developing products that reduce waste, combat pollution, and provide eco-friendly alternatives (Allal-Chérif et al., 2023; Gunawan et al., 2021; Hanohov & Baldacchino, 2018; Kirkwood & Walton, 2010). In the post-entry stage, ethical values shape operational decisions, including the selection of environmentally friendly materials, low-carbon production methods, fair labor practices, and equitable value distribution (Gasbarro et al., 2018; Godley, 2024; Kutlu & Ngoasong, 2024). Additionally, these values influence partnerships and investor relations, encouraging entrepreneurs to collaborate with like-minded entities that uphold sustainability principles and to avoid associations with unethical practices or greenwashing (Allal-Chérif et al., 2023; Bergset, 2018; Chen et al., 2023; Cui et al., 2019; Fischer et al., 2018; Hanohov & Baldacchino, 2018; Yacoub et al., 2022). Therefore, ethical values are central to sustainable entrepreneurship, guiding decision-making across all stages.

Building on this foundation, sustainable entrepreneurship is further supported by traits that enhance capacity development, such as flexibility, adaptability, and continuous learning. Sustainable entrepreneurs exhibit flexibility and adaptability by demonstrating resilience in their business practices. They actively listen to customer feedback, analyse market trends, and adjust their offerings based on insights from reviews, social media, and other external sources (Allal-Chérif et al., 2023; Hanohov & Baldacchino, 2018). These actions result in strategies that focus on employee well-being, enhance customer satisfaction, and update outdated business practices. To enhance value, sustainable entrepreneurs focus on fostering employee satisfaction by building trust, granting autonomy, and improving workplace design (Allal-Chérif et al., 2023). They also provide value-added services, such as repairs, free shipping, and product redesigns to meet customer needs (Allal-Chérif et al., 2023; Fischer et al., 2018; Gunawan et al.,

2021). Additionally, many invest in product testing and research and development to ensure consistent quality (Allal-Chérif et al., 2023; Bergset, 2018; Godley, 2024). These strategies collectively reduce financial losses, attract investors, and contribute to long-term business success (Allal-Chérif et al., 2023; Bergset, 2018; Gasbarro et al., 2018).

Apart from flexibility and adaptability, continuous learning is a key aspect of capacity development for both sustainable entrepreneurs and their employees. Cui et al. (2019) and Hanohov and Baldacchino (2018) emphasise that ongoing education and capacity-building are essential for maintaining a competitive edge and ensuring long-term success. Sustainable entrepreneurs actively pursue personal development (Hanohov & Baldacchino, 2018) while also fostering a culture of learning within their teams (Allal-Chérif et al., 2023; Chen et al., 2023; Cui et al., 2019). To support this, they implement initiatives such as workshops, training programs, and skill development activities, encouraging continuous improvement across their organisations (Allal-Chérif et al., 2023; Gunawan et al., 2021). By prioritising continuous learning, sustainable entrepreneurs not only enhance their own adaptability and decision-making but also empower employees, leading to greater job satisfaction, improved customer value, and consistent product quality.

Personal background factors, such as gender, age, education, and experience, play a significant role in shaping entrepreneurial approaches alongside personal traits. The role of gender in sustainable entrepreneurship remains a topic of debate. While some scholars argue that men and women share similar values in sustainability-driven ventures (Gunawan et al., 2021), others suggest they focus on different aspects. Women are often seen as more attuned to environmental and social issues (Chen et al., 2023; Kutlu & Ngoasong, 2024), whereas men tend to focus on innovation development and investment opportunities (Chen et al., 2023; Kirkwood & Walton, 2010). Despite these perspectives, women remain underrepresented in sustainable leadership roles, a disparity potentially stemming from societal biases (Chen et al., 2023). These biases, often linked to family responsibilities, may create skepticism about women's ability to manage sustainable ventures effectively (Chen et al., 2023; Kutlu & Ngoasong, 2024). Similarly, generational differences also shape entrepreneurial approaches. Younger

entrepreneurs, influenced by heightened awareness of global challenges, are more likely to adopt proactive and innovative sustainability strategies (Hanohov & Baldacchino, 2018; Muñoz, 2018). In contrast, older entrepreneurs leverage their extensive experience but often favour market expansion over sustainability-driven development (Chen et al., 2023; Hanohov & Baldacchino, 2018).

Education plays an important role in shaping sustainable entrepreneurs' decision-making, innovation capacity, and approach to sustainability. Sustainable entrepreneurs with degrees in environmental sciences or related fields tend to have a deeper understanding of sustainability issues, enabling them to make informed decisions (Chen et al., 2023; Hanohov & Baldacchino, 2018; Muñoz, 2018). Advanced education, such as master's and doctoral degrees, is often associated with a stronger focus on research and development (R&D) and environmental protection. In contrast, entrepreneurs with lower educational qualifications frequently emphasise social responsibility (Chen et al., 2023). Additionally, professional expertise in fields like business, science, and technology enhances the capacity to adopt green practices and innovate effectively (Chen et al., 2023; Hanohov & Baldacchino, 2018). Together, these background factors significantly shape the strategies and priorities of sustainable entrepreneurs, influencing their ability to address complex global challenges and drive impactful ventures effectively.

3.1.2 Sustainable Entrepreneurs: Motivation

Motivation is the force that initiates and triggers sustainable entrepreneurial intentions to drive sustainable business ventures. Motivations vary widely, ranging from a desire to tackle environmental and societal problems to profit-driven goals, personal values (Hanohov & Baldacchino, 2018), and religious or cultural influences (Godley, 2024; Gunawan et al., 2021; Kutlu & Ngoasong, 2024). Across the literature, a strong commitment to addressing pressing social and environmental challenges consistently emerges as the primary driving force for sustainable entrepreneurs. Many are motivated by the urgency to combat issues such as climate change (Allal-Chérif et al., 2023; Godley, 2024), pollution (Allal-Chérif et al., 2023; Gunawan et al., 2021), waste (Allal-Chérif et al., 2023; Hanohov & Baldacchino, 2018), and threats

to human health and the well-being of future generations (Botelho et al., 2023; Fischer et al., 2018; Gunawan et al., 2021; Hanohov & Baldacchino, 2018; Muñoz, 2018).

While financial stability is necessary for sustaining ventures, sustainable entrepreneurs primarily focus on environmental and social impact over profit maximisation. Profit-driven sustainable entrepreneurs, for instance, often focus on generating sufficient returns to sustain their businesses and families (Fischer et al., 2018; Gunawan et al., 2021; Hanohov & Baldacchino, 2018). However, rather than prioritising profit maximisation, sustainable entrepreneurs aim to balance financial sustainability with broader environmental and social goals. Additionally, intrinsic motivations such as independence, self-employment, and meaningful work significantly influence sustainable entrepreneurial decisions (Bergset, 2018; Botelho et al., 2023; Fischer et al., 2018; Gunawan et al., 2021; Hanohov & Baldacchino, 2018; Muñoz, 2018). Many sustainable entrepreneurs value autonomy and creativity, aligning their business practices with personal beliefs and principles (Hanohov & Baldacchino, 2018).

Religious and cultural values further shape sustainable entrepreneurial motivations, fostering a sense of responsibility toward preserving natural resources and contributing to societal well-being. Entrepreneurs inspired by faith and cultural identity, such as those rooted in Hinduism, Balinese traditions, Javanese culture, Islam, or Christianity, often adopt eco-friendly practices and community-focused initiatives. These efforts reflect their ethical commitment to sustainability and their dedication to addressing both local and global challenges (Godley, 2024; Gunawan et al., 2021; Kutlu & Ngoasong, 2024). Overall, the diverse motivations of sustainable entrepreneurs highlight their commitment to creating impactful, responsible, and purpose-driven businesses that address environmental and societal needs while balancing financial sustainability.

3.1.3 Sustainable Entrepreneurs: Opportunity Recognition

While motivation drives entrepreneurs toward sustainability goals, opportunity recognition determines how these goals are translated into actionable ventures. External influences, such as community engagement and market

exposure, play an important role in this process by equipping entrepreneurs with the ability to identify and act on sustainable opportunities. Entrepreneurs embedded in sustainability-focused communities or with international exposure are often better positioned to recognise such opportunities, as these environments encourage the adoption of sustainable business practices (Hanohov & Baldacchino, 2018; Muñoz, 2018). However, sustainable ventures are not always rooted in prior experience or personal background. Kirkwood and Walton (2010) argue that many entrepreneurs identify opportunities by recognising market gaps and unmet societal needs, often driven by shifting market dynamics and growing consumer demand. For example, entrepreneurs may address specific market demands such as affordable healthcare services, biodegradable packaging (Fischer et al., 2018), durable outdoor apparel (Allal-Chérif et al., 2023), alternative energy sources (Kirkwood & Walton, 2010), and alternative food options (Fischer et al., 2018; Godley, 2024; Kirkwood & Walton, 2010). These examples demonstrate how opportunity recognition is shaped by evolving societal needs and market trends, enabling entrepreneurs to identify gaps that align with sustainability goals. In conclusion, opportunity recognition in sustainable entrepreneurship is not limited to prior experience but is also driven by proactive engagement with societal challenges and market dynamics.

3.2 Organisational Level: Sustainable Enterprises

At the organisational level, sustainable enterprises adopt key strategies to enhance their long-term viability and impact. Findings reveal four aspects: alternative funding strategies, brand identity, innovation and technology, and collaborative strategies. First, it describes how sustainable enterprises secure financial resources through diverse funding mechanisms beyond traditional investment. Second, it brings attention to the role of brand identity in building trust and market recognition. Third, innovation and technology serve as drivers of competitive differentiation and operational efficiency, enabling enterprises to develop sustainable solutions that align with market demands. Finally, the findings discuss collaborative strategies, demonstrating how partnerships and networks strengthen sustainability-driven business models. Together, these aspects illustrate

how sustainable enterprises build resilience, foster growth, and create lasting value in competitive markets.

3.2.1 Alternative funding strategies

Given the high operational costs and the need for consistent growth, exploring alternative funding options has become a vital strategy for sustainable entrepreneurs to ensure financial stability. Resource constraints are a common challenge, especially in the early stages of ventures, when access to traditional funding channels is often limited. To overcome these challenges, entrepreneurs adopt diverse funding strategies tailored to their growth needs. For example, they frequently rely on business angels and self-funding during the initial phases (Bergset, 2018; Botelho et al., 2023). In later stages, traditional capital providers, such as banks, corporations, and venture capital firms, typically engage once ventures demonstrate measurable impact and viability (Bergset, 2018; Botelho et al., 2023; Godley, 2024). This progression underscores the need to align funding sources with the stages of business development, where early-stage funding emphasises flexibility and accessibility, while later-stage investments prefer sustainability and measurable returns.

Sustainable investors offer another critical avenue for financial support, particularly for ventures that align with ethical and sustainable values. These investors focus on long-term returns that balance profitability with meaningful social and environmental impact (Bergset, 2018; Botelho et al., 2023). To attract such investors, sustainable entrepreneurs must demonstrate transparency, accountability, and strong sustainability commitments, which help build trust and shared goals between stakeholders (Botelho et al., 2023; Chen et al., 2023; Kutlu & Ngoasong, 2024). However, despite the growing interest in sustainable ventures, there remains a risk of greenwashing, where investors prefer superficial appearances over genuine impact (Fischer et al., 2018; Yacoub et al., 2022). In response, some entrepreneurs opt to avoid traditional investors altogether to maintain authenticity and prevent over-marketing or unsustainable practices. This has led to the growing popularity of crowdfunding as an alternative funding solution.

Crowdfunding has emerged as one of the most effective and low-risk funding options, enabling sustainable entrepreneurs to address financial challenges while maintaining autonomy (Fischer et al., 2018; Yacoub et al., 2022). Crowdfunding platforms allow entrepreneurs to bypass the delays and constraints of traditional funding channels, such as lengthy approval processes or high-interest loans (Fischer et al., 2018; Yacoub et al., 2022). Other than providing essential capital, crowdfunding also serves as a powerful communication tool, enabling entrepreneurs to showcase their products, gauge market interest, and build trust and legitimacy among stakeholders (Yacoub et al., 2022). This dual function of crowdfunding—financial support and brand communication—empowers entrepreneurs to secure the resources they need while retaining control over their ventures, ensuring long-term viability. At the end, these funding approaches enable sustainable enterprises to secure the necessary resources while maintaining their authenticity and driving impactful social and environmental outcomes

3.2.2 Brand Identity

Building a strong brand identity has become a core marketing strategy for sustainable enterprises to establish trust, connect with stakeholders, and communicate their commitment to sustainability (Allal-Chérif et al., 2023, Gasbarro et al., 2018; Godley, 2024; Kirkwood & Walton, 2010; Kutlu & Ngoasong, 2024. To achieve this, sustainable entrepreneurs adopt a dual approach combining face-to-face interactions and media platforms. Direct interactions include hosting events at shops, train stations, and community meeting places, where entrepreneurs can directly connect with customers and demonstrate their dedication to sustainability (Allal-Chérif et al., 2023). Pilot initiatives and exemplary cases further enhance credibility by providing tangible demonstrations of sustainable products and practices (Gasbarro et al., 2018). Additionally, civil projects, expos, market visits, and word-of-mouth marketing help broaden the brand's reach and reinforce trust through meaningful personal engagement (Gasbarro et al., 2018; Kirkwood & Walton, 2010; Kutlu & Ngoasong, 2024). Workshops also serve as valuable educational platforms for diverse audiences, including locals, foreigners, and children, by presenting the brand's contributions to sustainability (Gunawan et al., 2021; Kutlu & Ngoasong, 2024). Together, these

efforts provide sustainable entrepreneurs with opportunities to connect authentically with stakeholders, build credibility, and amplify their impact, ensuring a stronger and more recognisable brand presence.

In addition to direct interactions, media platforms amplify the brand's reach and message. Social media and television are essential tools for communicating a brand's mission and sustainability efforts (Godley, 2024; Gunawan et al., 2021; Kirkwood & Walton, 2010). Tailored TV advertisements target specific customer segments (Godley, 2024), while engaging posts on platforms like Instagram (Gunawan et al., 2021) and company websites (Kirkwood & Walton, 2010) showcase the brand's environmental and social contributions. These media strategies complement face-to-face interactions, enhancing the brand's market presence, appeal, and competitiveness by strengthening the brand's market presence, appeal, and competitiveness. Together, both direct and indirect platforms enhance credibility, build recognition, and address information asymmetry, which Hanohov et al. (2018) warn can undermine the value chain if customers lack awareness of sustainability concepts. Consequently, sustainable enterprises lean forward building a trustworthy brand identity through both direct and indirect platforms to engage stakeholders and demonstrate their commitment to sustainability.

3.2.3 Innovation and Technology

Innovation and technology drive market differentiation by enabling businesses to develop unique products that align with consumer preferences while addressing environmental and social challenges. The review finds that sustainable innovation can either attract or discourage investors, depending on how well it is implemented (Bergset, 2018). Poorly designed sustainable products that fail to meet consumer expectations often struggle to succeed in the market (Gasbarro et al., 2018). In contrast, unique and well-crafted sustainable innovations can attract both customers and investors (Bergset, 2018; Gasbarro et al., 2018). Businesses that offer sustainable innovative products and services often gain attention from stakeholders. Examples include services and products that are more convincing (Bergset, 2018), durable, colourful (Allal-Chérif et al., 2023; Kutlu & Ngoasong, 2024), fashionable, and eco-friendly (Fischer et al., 2018; Hanohov & Baldacchino,

2018). These features not only tackle environmental concerns but also meet consumer demand for quality and sustainability.

As important as innovation, green technology plays a pivotal role in the success of sustainable ventures by preventing operational failures and fostering long-term viability (Cui et al., 2019). Green technology includes environmentally friendly processes, products, and services designed to reduce environmental impact, enhance energy efficiency, conserve resources, and minimise waste. Bergset (2018), highlights that technology-based sustainable products are essential for shaping market dynamics while driving competitiveness and innovation. By investing in advanced technologies and software, sustainable entrepreneurs can achieve multiple benefits. For instance, Gasbarro et al. (2018) and Gunawan et al. (2021) stress that such investments enhance market positioning while significantly reducing operational costs over time, reinforcing the strategic importance of technology in driving sustainable entrepreneurship. Practical applications further demonstrate the value of technology in addressing societal and environmental challenges. Sustainable entrepreneurs often conduct extensive laboratory experiments to develop innovative alternative products, such as those aimed at tackling health-related issues, which align with both market demands and sustainability goals (Godley, 2024; Muñoz, 2018). These advancements not only meet pressing societal needs but also strengthen the credibility and impact of sustainable enterprises in increasingly competitive markets. Together, innovation and green technology provide sustainable entrepreneurs with a distinct competitive edge.

3.2.4 Collaborative strategies

Collaborative strategies are fundamental to the success of sustainable entrepreneurship, enabling businesses to build connections and share resources effectively. These strategies are characterised by fostering long-term stakeholder relationships, collaborating within industries (Allal-Chérif et al., 2023; Fischer et al., 2018; Gunawan et al., 2021), and forming partnerships across sectors (Gasbarro et al., 2018; Godley, 2024; Gunawan et al., 2021). Within organisations, sustainable entrepreneurs focus on cultivating enduring relationships by promoting a positive

and inclusive work environment (Allal-Chérif et al., 2023). This approach includes offering employee benefits such as bonuses, childcare services, and opportunities for idea-sharing, which foster trust and engagement (Allal-Chérif et al., 2023; Fischer et al., 2018; Gunawan et al., 2021). Additionally, building strong internal teams with co-founders and colleagues who share similar values reinforces cohesion, drives innovation, and strengthens overall strategies (Fischer et al., 2018; Muñoz, 2018). Collaboration within shared business networks further amplifies these efforts (Godley, 2024; Kutlu & Ngoasong, 2024). For example, franchising models help distribute risks and rewards while maintaining effective waste management, striking a balance between operational efficiency and sustainability (Kutlu & Ngoasong, 2024). Another example is when employees test products in company cafeterias and network-owned restaurants, gathering feedback to improve quality and align products with organisational goals (Godley, 2024). These internal and network-based collaborations ensure efficient resource-sharing, maintain product quality, and reduce waste.

Cross-sector partnerships comprise another component of collaborative strategies, providing access to new resources and growth opportunities. Collaborations with corporations and financial institutions enable entrepreneurs to secure funding, access critical resources, and ensure operational sustainability (Gasbarro et al., 2018; Godley, 2024; Gunawan et al., 2021). Joint ventures further expand these opportunities, allowing businesses to share financial risks while enhancing their reputation and market reach. For instance, partnering with well-known supermarkets to display products not only boosts sales growth but also enhances brand visibility and credibility among consumers (Godley, 2024). Additionally, fostering relationships with experts and exchanging market insights promotes innovation and creates new avenues for growth, as outlined by Muñoz (2018). Collectively, these cross-sector collaborations significantly enhance brand identity, improve sales performance, and provide essential resources for sustainable growth.

Engagement with regulatory and political entities is another form of strategic collaboration. By actively participating in political activities and networking with regulatory bodies, sustainable entrepreneurs build social capital, enhance their

influence, and establish public awareness and legitimacy for their ventures (Gasbarro et al., 2018). This engagement strengthens public relations, facilitates the sharing of vital information, and fosters meaningful interactions, ultimately creating a solid foundation for long-term success (Hanohov & Baldacchino, 2018; Kirkwood & Walton, 2010). In essence, collaborating with legal entities further bolsters operational efficiency, improves social capital, and increases public recognition. Thus, collaboration at multiple levels allows sustainable enterprises to address resource challenges, build meaningful stakeholder relationships, and achieve lasting impact in their industries.

3.3 Societal Level: Sustainable Entrepreneurship Ecosystem

Findings from the synthesis reveal societal dimensions sustainable entrepreneurship, focusing on challenges, market acceptance, and impacts. First, it reveals key challenges, such as institutional barriers, market constraints, and societal limitations that hinder growth. Second, it indicates market acceptance, reinforcing how shifting consumer preferences drive demand for sustainable businesses. Finally, it shows social and economic impacts, including job creation, community empowerment, financial resilience, and ethical business leadership. Together, these findings illustrate the broader role of sustainable entrepreneurship in fostering long-term societal progress.

3.3.1 Barriers to Sustainable Entrepreneurship

Sustainable entrepreneurship faces numerous challenges that hinder growth and scalability, stemming from institutional barriers, market constraints, and societal limitations. A major institutional barrier is the lack of supportive regulatory frameworks and government involvement. Many sustainable enterprises operate in environments where policies promoting or supporting sustainability are inconsistent or inadequate, creating significant obstacles for sustainability-driven ventures (Bergset, 2018). For instance, rapidly changing regulations often lead to compliance difficulties, particularly for ventures requiring long development timelines (Gasbarro et al., 2018; Godley, 2024). This absence of clear and stable policies generates uncertainty, stifling innovation and discouraging long-term planning. Furthermore, limited government engagement enables lobbying efforts by

established industries to dominate, delaying the implementation of sustainability-focused policies and impeding the growth of innovative enterprises within the sustainable entrepreneurship ecosystem (Gasbarro et al., 2018). These institutional barriers collectively slow progress, constrain growth, and reduce the capacity of sustainable entrepreneurship to drive systemic change and achieve long-term impact.

Market-related challenges also pose significant obstacles for sustainable entrepreneurship, particularly for enterprises operating in niche markets with limited demand. Restricted access to international markets limits opportunities for expansion, making it difficult for businesses to establish legitimacy or meet industry benchmarks (Hanohov & Baldacchino, 2018; Gunawan et al., 2021). Moreover, the novelty of sustainable products and services exacerbates these challenges, as customers and investors often lack familiarity with these offerings due to limited market precedence and inadequate information (Bergset, 2018; Cui et al., 2019). This lack of awareness creates an information gap, fostering stakeholder uncertainty and reducing trust in sustainable ventures. Without clear market understanding, investors hesitate to commit funds, as the high costs and lengthy development timelines associated with sustainable enterprises make them appear risky (Allal-Chérif et al., 2023; Godley, 2024; Yacoub et al., 2022). Consequently, market-related challenges hinder the growth of sustainable entrepreneurship, as enterprises struggle to establish credibility, attract support, and compete effectively in broader markets.

The information gap in market and awareness extends to broader societal challenges, restricting the flow of expertise and skilled labor essential for sustainable entrepreneurship. Bergset (2018) highlights that leaders lacking a business background often face difficulties in scaling operations and managing ventures effectively, which limits their ability to foster growth and innovation. Similarly, scholars emphasise that a lack of green technology expertise and standardised skills creates a gap in developing and disseminating the knowledge necessary for sustainability-focused initiatives (Gasbarro et al., 2018; Cui et al., 2019). For example, the geothermal heat pump industry, instead of capitalising on its market potential, suffered setbacks due to unskilled technicians installing faulty

systems (Gasbarro et al., 2018). Such failures not only hinder the growth of sustainable enterprises but also diminish trust in sustainable solutions. To conclude, these external challenges collectively impede the growth and trust in sustainable entrepreneurship, underscoring the need for targeted solutions.

3.3.2 Market Acceptance

Despite the above-mentioned challenges, sustainable enterprises are steadily gaining market acceptance as consumer preferences shift toward sustainability. This is particularly evident among a growing segment of consumers known as "green customers." These customers increasingly select over brands that reflect ethical practices, transparency, and accountability (Chen et al., 2023). By favouring products and services aligned with their values, these consumers create opportunities for enterprises that integrate ethical decision-making into sourcing, production, and sustainability claims (Godley, 2024; Muñoz, 2018). For instance, enterprises that emphasise eco-friendly packaging, renewable energy solutions, and fair labor practices are increasingly attracting customer loyalty and expanding their market share (Allal-Chérif et al., 2023). This alignment between customer values and business practices not only fosters brand trust but also enhances the competitive advantage of sustainable enterprises. Additionally, businesses that actively communicate their commitment to social and environmental responsibility—through transparent reporting and public engagement—further strengthen their appeal to green customers. In conclusion, the growing demand from green customers represents a vital opportunity for sustainable enterprises to build stronger relationships with ethically conscious consumers while reinforcing their market position and long-term viability.

3.3.3 Impacts

3.3.3.1 Social Value Creation

Sustainable entrepreneurship delivers significant societal value by addressing ecological challenges, reshaping societal norms, and empowering communities. At the heart of its impact is environmental preservation achieved through innovative practices that balance economic growth with ecological responsibility. These ventures contribute to cleaner environments and foster

ecological awareness, paving the way for a healthier planet (Gasbarro et al., 2018; Kutlu & Ngoasong, 2024). By minimising resource degradation and supporting sustainable value chains, these enterprises protect natural resources and promote resilient ecosystems (Fischer et al., 2018). Specific initiatives, such as circular economy models and investments in renewable energy, showcase the integration of eco-friendly materials, processes, and ingredients to reduce waste and carbon emissions (Allal-Chérif et al., 2023; Kutlu & Ngoasong, 2024). These efforts go beyond mitigating environmental harm by establishing pathways for long-term sustainability.

Besides environmental contributions, sustainable entrepreneurship plays a transformative role in fostering social value. One key contribution is the creation of green jobs, providing meaningful employment in industries aligned with ecological and social principles (Allal-Chérif et al., 2023; Gasbarro et al., 2018). These ventures prefer collaborations with local suppliers and farmers, ensuring direct economic benefits for communities through market access and income generation (Allal-Chérif et al., 2023; Hanohov & Baldacchino, 2018; Kutlu & Ngoasong, 2024). This localised approach enhances economic stability, empowers individuals, and improves quality of life.

Sustainable enterprises also drive societal transformation by promoting responsible consumption and fostering environmental awareness. For example, efforts to transition from fossil fuels to alternative energy sources not only reduce environmental impact but also encourage sustainable lifestyles (Gasbarro et al., 2018). Industries such as fashion and tourism benefit from sustainable entrepreneurs' emphasis on ecological responsibility by reducing overconsumption and championing product reuse (Allal-Chérif et al., 2023; Kutlu & Ngoasong, 2024). Additionally, targeted educational initiatives—such as campaigns, workshops, and advisory services—spread awareness of sustainability practices, engaging communities and stakeholders across diverse demographics (Gasbarro et al., 2018; Gunawan et al., 2021). These programs inspire behavior change and encourage more sustainable decisions on both individual and collective levels. Therefore, sustainable entrepreneurship delivers environmental preservation, community

empowerment, and cultural transformation, fostering a more sustainable and equitable future.

3.3.3.2 Economic Impacts

Economic value in sustainable entrepreneurship is driven by ethical business practices that build consumer trust, enhance brand loyalty, and ensure financial stability, enabling business growth and local economic development. Sustainable enterprises integrate profitability with ecological and social values, building trust through transparency and ethical commitments (Allal-Chérif et al., 2023; Chen et al., 2023; Fischer et al., 2018; Gasbarro et al., 2018; Godley, 2024). By attracting environmentally conscious consumers and fostering loyalty, they develop resilience that enables them to sustain operations even during economic downturns or crises (Gasbarro et al., 2018). For instance, companies producing durable outdoor gear or alternative protein products illustrate how aligning sustainability missions with market success strengthens customer trust and sets standards for ethical business practices (Allal-Chérif et al., 2023; Godley, 2024). This resilience, in turn, allows these businesses to maintain financial stability in competitive markets while continuing to grow.

Apart from financial survival, sustainable enterprises contribute to local economic growth by generating jobs and supporting local suppliers and communities. By prioritising fair economic practices and fostering partnerships with local stakeholders, they empower individuals and strengthen regional economies (Allal-Chérif et al., 2023; Kutlu & Ngoasong, 2024). In conclusion, sustainable enterprises exemplify how profitability, social responsibility, and environmental stewardship can coexist, demonstrating that sustainable business models can drive both economic success and positive societal impact.

Chapter 4 Discussion

This narrative synthesis aims to improve our understanding of sustainable entrepreneurship by defining what it is and how it differs from other forms of entrepreneurship, such as traditional, social, and environmental entrepreneurship. Drawing on empirical research, the review explores sustainable entrepreneurship across three levels: individual, organisational, and societal. It identifies five key contributions that offer both theoretical insights and practical relevance. First, it shows that sustainable entrepreneurship is not a uniform approach of doing business but a dynamic process. Second, it highlights the influence of local context and external conditions, including social, cultural, and institutional factors. Third, it points to the importance of identity, values, and personal motivations in shaping decisions and outcomes. Fourth, it shows that stakeholder engagement and co-creation are essential for building trust and achieving long-term impact. Finally, it highlights how policies, funding, and consumer behaviour can either support or limit the success of sustainable ventures.

4.1 Sustainable Entrepreneurship as a Dynamic Process

Findings show that SE is a dynamic process shaped by the entrepreneur's values, relationships with stakeholders, and the wider institutional context. SE is inherently complex because it operates across economic, social, and environmental goals, requiring entrepreneurs to address multiple outcomes at the same time. As a result, they must constantly adapt to changes in regulations, consumer expectations, and financial pressures. This need for adaptability reflects an effectuation logic, which suggests that in uncertain and changing environments, entrepreneurs do not follow strict or predictive plans. Instead, they begin with the resources they already have, such as their skills, experience, and networks, and develop their ventures through trial, collaboration, and learning (Sarasvathy, 2001). In SE, this approach supports flexible, resourceful, and partnership-driven strategies. Effectuation characterises how sustainable entrepreneurs build their ventures step by step while staying true to their social and environmental aims.

Effectuation logic can be seen across many areas of SE activity. In terms of resourcing, entrepreneurs do not wait for ideal conditions or perfect funding. Instead, they use what is locally available and work creatively with limited resources, often building on community support and stakeholder contributions (Bergset, 2018; Botelho et al., 2023; Fischer et al., 2018; Yacoub et al., 2022). This is similar to traditional entrepreneurship, where entrepreneurs also use available resources to navigate uncertainty (Sarasvathy, 2001). However, while traditional ventures usually focus on profit and market share, SE entrepreneurs apply this flexibility to balance economic, social, and environmental goals. Networking also plays an important role, as effectual entrepreneurs engage stakeholders early on and build strong relationships with regulators (Gasbarro et al., 2018), customers (Allal-Chérif et al., 2023; Hanohov & Baldacchino, 2018), and collaborators (Fischer et al., 2018; Muñoz, 2018). This strong stakeholder engagement shares common ground with social entrepreneurship, which also relies heavily on local networks and community support (Mair & Martí, 2006). The difference is that while social entrepreneurship prioritises social impact, SE uses these networks to support a wider range of outcomes, including environmental and economic goals.

Regarding strategy, SE ventures generally tend to exercise flexible planning over following rigid long-term goals. They adapt as they learn from real-world feedback (Allal-Chérif et al., 2023; Hanohov & Baldacchino, 2018). This supports the idea that effectuation in SE involves ongoing learning and flexibility, helping entrepreneurs to stay committed to their goals while responding to new challenges. Environmental entrepreneurs also operate under uncertainty, particularly in emerging green markets, and often use experimentation to stay viable (Dean & McMullen, 2007). However, SE differs by not only addressing environmental concerns but also aiming for community well-being and inclusive economic practices.

From a theoretical perspective, the concept of effectuation helps explain how SE ventures take shape and continue to operate in environments that are uncertain or limited in resources. It moves the focus away from detailed long-term planning and instead highlights the role of adaptability, creativity, and collaboration. In SE, this flexibility is essential because entrepreneurs must balance economic,

social, and environmental goals, often with limited support or clear pathways. Practically, this understanding suggests that support programmes, incubators, and policymakers should avoid rigid expectations. Instead, they should encourage skill-building, local partnerships, and gradual development based on trial and learning. This kind of support is particularly valuable in places where sustainability practices are still emerging.

4.2 The Relevance of Embeddedness in Sustainable Entrepreneurship

Another important insight from the findings is that SE is strongly shaped by the local context in which it operates. SE ventures do not function in isolation. They are influenced by the social, cultural, and regulatory environments around them, which affect how they build trust, find resources, and meet local needs. This connects to the concept of embeddedness, which suggests that entrepreneurs are linked to their surroundings through social relationships that shape their decisions and actions (Dacin et al., 1999). Embeddedness is important in entrepreneurship because entrepreneurs are influenced not only by social networks but also by regulatory and market conditions, which together shape their strategies and business outcomes (Kloosterman et al., 1999). Moreover, social ties also help entrepreneurs recognise opportunities and access valuable resources through their networks (Granovetter, 1985; Anderson & Jack, 2002)

Embeddedness can be understood in three dimensions: social (Granovetter, 1985; Dacin et al., 1999), cultural (Welter, 2011), and institutional (Anderson & Jack, 2002; Zahra et al., 2009). These dimensions offer insight into how SE ventures are embedded in and shaped by their local contexts. Social embeddedness refers to the personal ties and trust-based networks that entrepreneurs rely on for support (Granovetter, 1985). Internally, this is evident in close relationships among founders and employees who share long-term visions and sustainability values (Muñoz, 2018). Externally, sustainable entrepreneurs engage with local suppliers, community spaces, and public institutions to co-develop initiatives that reflect local priorities (Godley, 2024; Kutlu & Ngoasong, 2024). These relationships help entrepreneurs stay engaged with the community and recognise local needs and opportunities (Hanohov & Baldacchino, 2018; Muñoz, 2018). In this sense, SE

shares some similarities with traditional entrepreneurship, which also involves identifying opportunities through local experience (Shane & Venkataraman, 2000). However, while traditional entrepreneurs typically aim to fill market gaps for profit, sustainable entrepreneurs are driven by a combination of economic, social, and environmental values.

Cultural embeddedness refers to the influence of local values and beliefs on business decisions, especially those related to social and environmental concerns (Welter, 2011). Many sustainable entrepreneurs are influenced by religious and social values, which motivate them to care for the environment and support the well-being of their communities (Godley, 2024; Gunawan et al., 2021; Kutlu & Ngoasong, 2024). Institutional embeddedness involves how entrepreneurs engage with formal structures such as rules, policies, and governance systems (Anderson & Jack, 2002). SE ventures often work closely with local authorities and policymakers to gain legitimacy and access institutional support (Gasbarro et al., 2018). These connections help them respond more effectively to regulatory demands and align their activities with policy frameworks. Overall, this strong local engagement also aligns SE with social entrepreneurship, where community involvement and trust are central to identifying issues and creating shared solutions (Dacin et al., 2010; Mair & Martí, 2006). However, SE differs by also incorporating environmental goals alongside social and financial aims. This makes it distinct from social entrepreneurship, which tends to focus mainly on social outcomes, and from environmental entrepreneurship, which is often centred on ecological concerns (Dean & McMullen, 2007). SE combines all three elements, aiming to achieve the triple bottom line.

The concept of embeddedness provides insight into how sustainable ventures succeed by drawing on local knowledge, relationships, and institutional alignment. It also illustrates the importance of tailoring strategies to specific cultural and regulatory contexts. In practice, this suggests that support initiatives should encourage strong local networks and responsiveness to community needs, particularly in settings with limited formal infrastructure. Future studies could examine how embeddedness shifts as ventures scale beyond their original context. Although existing literature highlights its benefits (Dacin et al., 1999; Anderson &

Jack, 2002), there is limited understanding of how entrepreneurs maintain alignment with community values as they expand. As Johannisson (2011) notes, embeddedness is not static; it evolves and adapts as businesses grow.

4.3 Sustainable Entrepreneur Characteristics

SE often reflects the entrepreneur's own identity, influencing how goals are defined and pursued. Ethical principles, cultural norms, and religious beliefs play a central role in guiding decisions across the business journey. These values influence how opportunities are recognised, how products are designed, and how relationships with stakeholders are managed. This supports the relevance of entrepreneurial identity theory**,** which explains how an entrepreneur's self-perception shapes their actions and choices (Fauchart & Gruber, 2011). The theory suggests that entrepreneurs act in ways that are consistent with the identity they adopt, whether as opportunity-driven innovators, social change agents, or community stewards. In the context of SE, many individuals construct an identity that integrates moral responsibility with business practice, prioritising societal and environmental goals alongside economic objectives (Hoogendoorn et al., 2019; Shepherd et al., 2021). This identity-driven approach provides an explanation on how and why sustainable entrepreneurs remain committed to long-term, value-aligned outcomes even in the face of uncertainty or limited public backing.

Across different stages of venture development, identity-related values consistently influence decision-making. In the early stages, ethical concerns influence how entrepreneurs identify sustainability-related gaps, such as environmental degradation or community well-being (Kirkwood & Walton, 2010; Muñoz, 2018). These values also shape product development, often leading to the creation of eco-friendly solutions, low-carbon processes, and fair labour practices (Allal-Chérif et al., 2023; Hanohov & Baldacchino, 2018). In later stages, identity continues to guide operational and strategic decisions, including the choice of partners, the design of business models, and communication with customers (Kutlu & Ngoasong, 2024; Godley, 2024). Entrepreneurs often reject collaborations or investors that do not align with their values, prioritising authenticity over commercial gain (Chen et al., 2023; Fischer et al., 2018).

Entrepreneurial identity theory offers insight into how sustainable entrepreneurs stay aligned with their mission despite external pressures. Their identity acts as a stable foundation that supports decision-making in uncertain environments. It also provides external legitimacy, especially when stakeholders, such as customers or regulators, share similar values. Practically, these findings suggest that support initiatives for sustainable entrepreneurship should go beyond funding and training. Programmes could focus on peer learning, mentorship, and community building that helps entrepreneurs develop and express their values.

4.4 Stakeholder Engagement and the Role of Partnerships in Sustainable Entrepreneurship

The findings show that stakeholder engagement is a key feature of sustainable entrepreneurship. Entrepreneurs actively collaborate with a range of actors, including employees, customers, co-founders, suppliers, and regulators, not only to access resources but also to build trust and co-create value. These relationships are grounded in shared ethical values such as fairness, responsibility, and transparency. This reflects stakeholder theory, which argues that ventures should serve the interests of multiple stakeholder groups, not just shareholders (Freeman & McVea, 2005). In the context of SE, these connections help address practical challenges while also reinforcing legitimacy. Stakeholder engagement operates across internal and external levels. Internally, entrepreneurs promote inclusive practices by offering supportive working conditions and encouraging staff participation (Allal-Chérif et al., 2023; Fischer et al., 2018). Externally, partnerships with like-minded actors help strengthen innovation, resource sharing, and public engagement (Godley, 2024; Kutlu & Ngoasong, 2024). Crowdfunding also serves as a tool for both financing and building community trust (Yacoub et al., 2022). These practices reflect elements of social entrepreneurship, where collaboration supports collective impact (Mair & Martí, 2006), though SE adds further complexity by also aiming for environmental and economic goals. Stakeholder theory offers a useful lens for understanding how collaboration supports long-term sustainability outcomes in entrepreneurial ventures. The findings suggest that stakeholder engagement enables SE ventures to manage resource limitations, build legitimacy,

and pursue their environmental and social goals. This highlights the importance of support systems that foster partnerships and cross-sector collaboration.

4.5 Institutional and Market Challenges in Scaling Sustainable Entrepreneurship

Sustainable entrepreneurs often encounter systemic barriers when trying to scale their ventures. In many cases, regulatory frameworks related to sustainability are vague, inconsistent, or poorly enforced. This uncertainty complicates planning, investment, and innovation, leaving entrepreneurs without the institutional guidance or stability they need (Bylund & McCaffrey, 2017). Shifting policy priorities, limited incentives, and entrenched industry influence can restrict progress towards sustainability-focused reforms (Gasbarro et al., 2018; Godley, 2024; Bergset, 2018). To maintain control over their mission, many entrepreneurs seek alternative funding sources, such as crowdfunding, rather than rely on investors whose priorities may not align with sustainability values (Fischer et al., 2018; Yacoub et al., 2022). Market-related issues also restrict growth. Public awareness of sustainable offerings remains limited, and consumers are often unfamiliar with new business models or unsure of their credibility (Cui et al., 2019; Allal-Chérif et al., 2023). Investors, too, may be cautious about supporting ventures with longer return horizons. In addition, some entrepreneurs lack access to the technical expertise and skilled labour needed to adopt green technologies or develop low-carbon solutions (Gasbarro et al., 2018).

Despite these constraints, growing demand for ethical and sustainable products presents new opportunities. Customers who prioritise values such as environmental care, fair employment, and social justice are increasingly supporting ventures that reflect these concerns (Chen et al., 2023; Muñoz, 2018). Entrepreneurs are responding with branding strategies that emphasise transparency and trust, supported by social media outreach, education, and community engagement (Allal-Chérif et al., 2023). These approaches help build legitimacy and position sustainable ventures more competitively, especially in markets where gaps in policy infrastructure are presented. Together, institutional theory and green consumer behaviour offer a valuable lens for understanding how

sustainable entrepreneurs navigate external pressures while remaining aligned with their values. Entrepreneurs are not only adapting to systemic challenges but also contributing to cultural and market shifts through their actions and engagement with value-driven consumers.

4.6 Theoretical Contributions

This review contributes to the theoretical understanding of SE by offering a refined definition and clarifying its distinction from related forms of entrepreneurship. The findings characterise SE as a dynamic and context-sensitive process in which entrepreneurs pursue integrated economic, social, and environmental objectives. SE is defined as entrepreneurial activities that pursue economic, social, and environmental value in an integrated manner. It is distinguished by a value-driven identity, strong local embeddedness, active collaboration with stakeholders, and the ability to adapt to uncertain or evolving environments, reflecting both the personal commitment of entrepreneurs and the broader systemic context in which they operate. While some of these characteristics, such as stakeholder engagement and local embeddedness, are also found in social entrepreneurship (Lorenzo-Afable et al., 2023), what differentiates SE is its explicit and simultaneous focus on all three dimensions of the triple bottom line. This integrative approach sets SE apart from commercial entrepreneurship, which focuses primarily on financial returns. It also differs from social entrepreneurship and environmental entrepreneurship, which tend to pursue either social or ecological goals, by striving to balance all three dimensions.

The refined definition of SE contributes to theory by offering a more integrated and context-sensitive conceptualisation. It positions SE as a dynamic practice shaped by the interplay between entrepreneurial identity, stakeholder engagement, and structural conditions. Rather than viewing SE as a fixed or uniform approach, this perspective highlights its dynamic nature and responsiveness to shifting institutional, cultural, and market environments. By capturing this complexity, the review advances theoretical understanding and supports the development of flexible, multi-level frameworks that reflect the real-world variability of sustainable entrepreneurial practice. Future research should further explore this

complexity through longitudinal, multi-level studies that examine how entrepreneurs adapt over time, navigate triple bottom line trade-offs, and manage tensions between mission and market. Further work is also needed to examine how institutional frameworks and ecosystem support influence SE emergence and scalability in different regions. Research could also benefit from investigating the role of entrepreneurial identity and personal values in shaping sustainability commitments, particularly through comparative case studies.

4.7 Practical Contributions

This review provides useful insights for policymakers, educators, and support organisations, aiming to promote sustainable entrepreneurship. The findings highlight the need for tailored support systems that consider the unique challenges faced by sustainable ventures. These include flexible funding options, simplified regulatory processes, and programmes that recognise the value of balancing environmental, social, and economic goals. Public and private institutions can play a role by offering targeted financial support, encouraging partnerships, and creating policies that reward long-term sustainability outcomes rather than short-term gains. In practice, sustainable entrepreneurs benefit from training and resources that help them build strong identities, collaborate with stakeholders, and adapt to changing conditions. Education and incubator programmes should go beyond technical skills and focus on value-based decision-making, ethical leadership, and local engagement. By strengthening these areas, practitioners and ecosystem builders can help entrepreneurs remain committed to sustainability while growing their ventures. These practical contributions are essential for developing more inclusive, resilient, and sustainable business ecosystems.

4.8 Limitations

This review provides useful insights into sustainable entrepreneurship, but there are some limitations to consider. First, the inclusion criteria focused only on empirical studies published in peer-reviewed academic journals. While this ensured quality and consistency, it may have excluded valuable insights from books, book chapters, practitioner reports, and other literature. Second, the search was limited to two academic databases and included only articles published in

English and in top-ranked journals. Although this approach helped maintain academic rigour, it may have excluded relevant studies from lower-ranked or regional journals, especially those outside the dominant publishing regions. Third, most of the selected studies were based in developed countries, particularly in Europe and North America. As a result, the review may not fully reflect the practices and challenges of sustainable entrepreneurs operating in other geographic and institutional contexts, such as those in the Global South.

4.9 Directions for Future Research

Building on the dicussions, future research could further explore how the step-by-step, flexible approach of sustainable entrepreneurship operates across different national and regional contexts. It would be valuable to examine how sustainable entrepreneurs prioritise and adapt their goals in environments characterised by limited funding, unclear regulatory frameworks, or shifting public attitudes towards sustainability. Such investigation could reveal how entrepreneurs manage these transitions while maintaining alignment with their core mission and values. In addition, there is scope to study how entrepreneurial identity evolves over time, particularly as ventures scale or encounter pressures to compromise their sustainability commitments. Longitudinal research may provide deeper insight into whether entrepreneurs modify their values or develop new mechanisms to remain true to their sustainability-oriented identity under changing conditions. Further research could also investigate how stakeholder relationships transform as ventures grow, especially in balancing diverse expectations while pursuing economic, social, and environmental outcomes. These considerations highlight the need for policy approaches that not only promote regulatory reform but also foster broader public understanding and engagement with sustainability principles. Future studies could therefore explore how sustainable ventures build trust, influence consumer norms, and establish legitimacy in markets with limited institutional support, as well as how these strategies vary across different sectors and socio-cultural contexts.

Chapter 5 Conclusion

The purpose of this study was to develop a comprehensive understanding of SE by identifying its key components, guiding principles, and distinctive deatures across individual, organizational, and societal levels. Through a systematic review of fourteen empirical studies published between 1997 and 2024, the review synthesised how sustainability-oriented ventures emerge, operate, and create value. At the individual level, sustainable entrepreneurs are shaped by personal values, ethical motivations, and a strong sense of purpose. Their identity and decision-making are closely tied to sustainability, often emerging from lived experiences and community involvement. At the organisational level, SE ventures integrate sustainability into their core strategies, often through innovation, stakeholder engagement, and adaptive business models. These enterprises aim to deliver value across economic, social, and environmental dimensions while managing institutional and market-related challenges. At the societal level, SE is influenced by broader institutional settings, including policy frameworks, cultural norms, and consumer trends. Entrepreneurs contribute to social and environmental change by promoting sustainability values and building legitimacy, despite facing systemic and institutional constraints.

Taken together, the review suggests that SE is best understood as a dynamic and context-sensitive process in which sustainable entrepreneurs pursue economic, social, and environmental goals in an integrated manner. The review offers to a more nuanced definition by emphasising SE's multidimensional character, shaped by entrepreneurial identity, local context, stakeholder engagement, and broader structural conditions that influence how sustainability is enacted in practice. These insights contribute to a more refined conceptualisation of SE as a distinct form of entrepreneurship that addresses all three dimensions of the triple bottom line simultaneously. Unlike commercial, social, or environmental entrepreneurship, SE strives to deliberately balance all three dimensions of the triple bottom line, rather than prioritising one over the others. This commitment requires sustainable entrepreneurs to manage complexity, engage diverse actors, and operate with both adaptability and purpose. In terms of theory, the study

highlights the need for flexible, multi-level frameworks that account for SE's dynamic character and embedded nature. In practical terms, the study underscores the need for tailored support systems that enable sustainable entrepreneurs to balance social, environmental, and economic goals in dynamic contexts. Directions for future research include the need to better understand SE in different contextual settings, explore its practice across varying organisational and institutional environments, and refine evaluative approaches that capture and reflect the complexity of its triple bottom line outcomes.

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