Research Square

Preprints are preliminary reports that have not undergone peer review.
They should not be considered conclusive, used to inform clinical practice,
or referenced by the media as validated information.

Environmental Economics and the Sustainable Development Goals: Examining Their Interconnections and Implementation Challenges

Stelios Stefanos Drousiotis

s.drousiotis@alexander.ac.cy

Alexander College https://orcid.org/0009-0009-8073-3485

Giorgos Nicou

Alexander College https://orcid.org/0009-0003-3476-8712

Systematic Review

Keywords: Environmental Economics, Sustainable Development Goals (SDGs), System of Environmental-Economic Accounting (SEEA), Green Consumerism, Fiscal Policy, Degrowth

Posted Date: November 2nd, 2026

DOI: https://doi.org/10.21203/rs.3.rs-11564286/v1

License: This work is licensed under a Creative Commons Attribution 4.0 International License.
Read Full License

Additional Declarations: The authors declare no competing interests.

Environmental Economics and the Sustainable Development Goals: Examining Their Interconnections and Implementation Challenges

Stelios Stefanos Drousiotis, Interior Design Programme, Alexander College, Larnaca, Cyprus, s.drousiotis@alexander.ac.cy, https://orcid.org/0009-0009-8073-3485 (corresponding author)

Giorgos Nicou, Computer Science with Gaming Development Department, Alexander College, Larnaca, Cyprus, g.nicou@alexander.ac.cy, https://orcid.org/0009-0003-3476-8712

Abstract: Increasing environmental pressures, natural resource depletion and the ecological consequences of economic activity have intensified the need to reconsider the relationship between economic development and environmental sustainability. Within this context, environmental economics offers several approaches for addressing environmental challenges and supporting the United Nations Sustainable Development Goals (SDGs). Nevertheless, the effectiveness of these approaches remains influenced by economic, institutional and social constraints that may limit their practical implementation. Drawing upon existing academic literature, institutional reports and policy publications, this review critically examines the relationships between environmental economics and the SDGs, focusing on four approaches: the System of Environmental-Economic Accounting (SEEA), green consumerism, fiscal policy and degrowth. Particular attention is given to their potential contributions, implementation barriers and unintended socioeconomic consequences, especially within developing countries. The analysis indicates that these approaches offer different pathways towards sustainability, although their effectiveness depends on institutional capacity, policy coordination, market conditions and the consideration of social equity. Furthermore, the review highlights the importance of examining potential trade-offs between environmental objectives and economic development rather than assuming that environmental economic interventions necessarily generate beneficial outcomes. The study identifies a need for more integrated and interdisciplinary research that incorporates human behaviour, governance and socioeconomic conditions into environmental economic analysis.

Keywords: Environmental Economics; Sustainable Development Goals (SDGs); System of Environmental-Economic Accounting (SEEA); Green Consumerism; Fiscal Policy; Degrowth.

1. Introduction

Economic development, industrial production and wider human activities have contributed substantially to environmental degradation, particularly through air and water pollution (Huynh, 2020). These environmental pressures have significant implications for human health, ecological stability and the long-term availability of natural resources (Biswas et al., 2012; Pirmana et al., 2020). Atmospheric pollution contributes to climate-related risks, while the extensive exploitation of natural resources intensifies ecological deterioration and raises concerns regarding the sustainability of prevailing economic activities (Huynh, 2020; Pirmana et al., 2020). Such consequences extend beyond environmental systems, potentially undermining economic stability and societal well-being (Obst and Vardon, 2014). Consequently, environmental economics has become increasingly relevant to policy discussions, particularly in developing countries where economic growth, environmental protection and resource management must be considered collectively.

Alongside growing interest in environmental economics, the United Nations Sustainable Development Goals (SDGs) have established an internationally recognised framework for addressing interconnected development challenges. The SDGs encourage countries to pursue economic development while considering its social and environmental implications, reflecting the need to balance these dimensions rather than treating them as independent policy priorities (Sachs, 2012). Through their interconnected objectives, the SDGs seek to support coordinated responses to global sustainability challenges and guide progress towards sustainable development by 2030 (Mio et al., 2020). Nevertheless, the relationship between environmental economics and the SDGs requires critical consideration, particularly regarding the extent to which economic instruments and policy interventions contribute to measurable sustainability outcomes.

Despite increasing recognition of environmental economics within sustainability policy, the implementation of environmental economic strategies remains complex and may generate unintended economic and social consequences. Existing economic interventions have not consistently delivered the anticipated environmental improvements (Beder, 2011). Fiscal policy illustrates these difficulties, particularly where taxation, regulatory enforcement and informal economic activity interact in ways that complicate policy implementation (Biswas et al., 2012; Medina and Schneider, 2018). Although informal economic activity may reduce public revenues and weaken regulatory effectiveness, its relationship with environmental policy cannot be understood through taxation alone. Consequently, evaluating fiscal interventions requires consideration of the institutional and socioeconomic conditions influencing their outcomes.

Comparable tensions emerge in relation to green consumerism, which seeks to encourage environmentally responsible purchasing and production practices. Although environmentally motivated consumption may stimulate demand for products associated with reduced ecological impacts, its effectiveness depends on market conditions, product affordability and the credibility of environmental claims. Ambec and De Donder (2022) examine the interaction between green consumerism and environmental policy, illustrating the importance of considering how consumer preferences influence market and regulatory outcomes. These relationships suggest that environmentally oriented market mechanisms do not necessarily produce equitable or consistently beneficial outcomes, particularly where differences in purchasing power and market influence constrain participation.

Such implementation challenges are particularly significant for developing countries, where financial limitations, technological constraints, institutional capacity and varying levels of environmental awareness may influence the adoption of environmental economic strategies (Ulph and Ulph, 2021). These conditions indicate that the effectiveness of environmental economic interventions depends not only on their theoretical contribution to sustainability but also on the economic, social and institutional contexts in which they are implemented. Accordingly, assessing the relationship between environmental economics and the SDGs requires attention to potential synergies, trade-offs and the practical barriers affecting policy outcomes.

Building upon existing scholarship, the review critically examines the conceptual relationships between environmental economics and the Sustainable Development Goals (SDGs), focusing on four approaches: the System of Environmental-Economic Accounting (SEEA), green consumerism, fiscal policy and degrowth. Particular attention is given to their potential contributions, implementation barriers and socioeconomic consequences, especially within developing-country contexts. The analysis considers the conditions under which these strategies may support or constrain progress towards sustainable development, while distinguishing conceptual associations with the SDGs from demonstrated environmental and socioeconomic outcomes. This critical perspective provides a basis for examining the importance of policy design, institutional capacity and social considerations in environmental economic decision-making.

The remainder of the paper is organised as follows. Section 2 reviews the theoretical foundations of environmental economics and its relationship with the SDGs. Section 3 outlines the methodological approach, while Section 4 presents the findings concerning the four environmental economic strategies and their implementation barriers. Section 5 critically discusses the implications of these relationships, and Section 6 concludes by considering the principal findings, limitations and directions for further research.

Research Aim, Objectives and Research Questions

Research Aim:

The aim of this study is to critically examine the relationship between environmental economics and the United Nations Sustainable Development Goals (SDGs), evaluating the potential contributions, implementation barriers and socioeconomic consequences of environmental economic strategies, alongside approaches proposed in the literature for addressing these challenges, particularly within developing-country contexts.

Research Questions:

1. How are environmental economics and the Sustainable Development Goals conceptually interconnected within the broader pursuit of sustainable development?
2. How do the System of Environmental-Economic Accounting (SEEA), green consumerism, fiscal policy and degrowth potentially contribute to, or constrain, progress towards the Sustainable Development Goals?
3. What economic, social, institutional and practical barriers, including potential unintended consequences, are associated with implementing these environmental economic strategies?
4. What approaches proposed in the literature may help address these implementation challenges, particularly within developing-country contexts?

Research Objectives:

- To examine the conceptual interconnections between environmental economics and the Sustainable Development Goals within the broader framework of sustainable development.
- To critically evaluate the potential contributions and limitations of four environmental economic strategies, the System of Environmental-Economic Accounting (SEEA), green consumerism, fiscal policy and degrowth in relation to the SDGs.
- To identify and critically examine the economic, social, institutional and practical barriers, including potential unintended consequences, associated with implementing these strategies.
- To evaluate approaches proposed in the literature for addressing the identified implementation challenges, with particular consideration of developing-country contexts and implications for future research.

2. Literature Review

This section examines the theoretical foundations of environmental economics and their relationship with the Sustainable Development Goals (SDGs). Particular attention is given to economic principles, policy instruments and alternative approaches intended to address environmental degradation while supporting economic development and societal well-being. The discussion considers the limitations and underlying tensions associated with these approaches, providing a conceptual foundation for critically evaluating their potential contributions to environmental sustainability and the SDGs.

2.1 Environmental Economics

Environmental economics examines the management and allocation of environmental resources through economic theories, principles and analytical approaches. Drawing predominantly upon microeconomic perspectives, while also incorporating macroeconomic considerations, the discipline investigates how individual and collective economic decisions influence environmental conditions and resource availability. It further considers how economic structures, institutional arrangements and policy interventions may reconcile human preferences with ecological requirements (Field and Field, 2017). Within this context, sustainable development is commonly associated with maintaining the forms of capital necessary to support future generations, including human capital, manufactured capital and natural capital. Nevertheless, the relationship between these forms of capital raises fundamental questions regarding whether economic development can remain sustainable when environmental resources are progressively depleted.

Conventional economic approaches have historically addressed pollution and environmental degradation through the concept of negative externalities, whereby production or consumption imposes costs on third parties that are not fully reflected in market prices. Consequently, market mechanisms may fail to account for the wider environmental and social consequences of economic activity (Pearce, 2002). This limitation has encouraged environmental economists to reconsider how ecological conditions influence economic welfare, policy decisions and the valuation of environmental resources (Sagoff, 2012). Within this perspective, the natural environment is increasingly recognised as an essential component of economic activity, with environmental resources contributing to production, consumption and economic value alongside labour and manufactured capital (Nadeau, 2015).

Nevertheless, the economic treatment of environmental resources remains contested. Some approaches prioritise the efficient management of scarce resources, while others emphasise environmental goods and ecosystem services whose significance extends beyond observable market transactions (Sagoff, 2012). These differences reflect a broader tension between valuing nature according to its economic usefulness and recognising ecological protection as a responsibility that cannot be reduced entirely to monetary terms. Lélé (1991) highlights the conceptual complexity of sustainable development, particularly where environmental priorities intersect with economic and social objectives. Similarly, Kahneman and Knetsch (1992) demonstrate that the valuation of public goods may reflect moral considerations and individual perceptions rather than purely financial preferences. Accordingly, environmental economic analysis must account for both measurable economic impacts and the human factors influencing environmental decision-making.

The relationship between economic activity and environmental degradation further demonstrates these tensions. Production and consumption contribute to ecological pressures, including biodiversity loss, freshwater depletion and ecosystem deterioration. Reducing environmentally damaging activities may therefore help preserve natural resources and alleviate environmental pressures (Venkatachalam, 2006). However, economic activity also supports employment, production and wider socioeconomic development, creating potential conflicts between ecological protection and economic opportunities. These relationships highlight the need to evaluate environmental interventions in relation to their economic consequences, distributional implications and effects on societal well-being.

A central concern within environmental economics is the relationship between economic growth and natural capital depletion. Conventional indicators of economic performance have historically prioritised production and income, often providing limited recognition of the environmental resources supporting economic activity. Pearce (2002) emphasises the importance of incorporating natural capital into economic accounting to better understand how environmental depletion influences long-term sustainability. This perspective challenges the assumption that increased economic output necessarily represents improvements in overall welfare, particularly where ecological losses remain insufficiently reflected in national accounting systems. Environmental economists have therefore advocated broader accounting approaches that recognise changes in natural capital and the environmental consequences of economic development.

Closely related to natural capital accounting is the principle of internalising environmental externalities. This involves incorporating environmental costs into economic decision-making through instruments such as taxation, charges and other financial mechanisms (Nadeau, 2015). Although such measures may encourage reductions in environmentally damaging activities, their effectiveness depends on how accurately environmental costs are identified and represented. Beder (1996) questions the reliance on price-based environmental measures, particularly where financial compensation is considered an acceptable alternative to preventing ecological damage. Consequently, internalising environmental costs does not necessarily guarantee environmental protection, especially when ecological losses are difficult to quantify or cannot be adequately compensated through monetary mechanisms.

These theoretical concerns are reflected in several environmental economic strategies. Green consumerism, for example, seeks to influence production and market behaviour through environmentally motivated purchasing decisions. However, its effectiveness depends on consumer preferences, market conditions and the relationship between voluntary purchasing behaviour and environmental regulation (Ambec and De Donder, 2022). Government intervention provides another approach through fiscal policy, including environmental taxation, subsidies and public expenditure intended to influence economic activity and encourage environmentally responsible practices (Beder, 1996; Musgrave and Musgrave 1989). Nevertheless, fiscal instruments do not automatically generate environmental improvements, as their outcomes depend on policy design, institutional capacity and the extent to which environmental objectives are incorporated into economic decision-making (Pearce, 2002).

Alongside these approaches, degrowth challenges the assumption that continuous economic expansion is necessary or desirable under conditions of ecological constraint. Rather than prioritising increased production and economic output, degrowth encourages reconsideration of how economic systems distribute resources, support societal well-being and operate within environmental limits. Plaza-Úbeda et al. (2020) examine the importance of interconnected organisational and economic systems within sustainability-oriented approaches, while Jakob and Edenhofer (2014) discuss the relationship between green growth, degrowth and the governance of common resources. These perspectives indicate that environmental sustainability cannot be reduced to a simple choice between economic development and ecological protection. Instead, the implications of different economic models must be evaluated in relation to resource distribution, institutional arrangements and social welfare.

Within the scope of this review, four environmental economic strategies are examined: the System of Environmental-Economic Accounting (SEEA), green consumerism, fiscal policy and degrowth. These approaches represent distinct mechanisms for addressing environmental degradation through economic measurement, consumer behaviour, government intervention and alternative models of economic development. Although each offers potential contributions to the SDGs, their effectiveness remains dependent on implementation conditions, socioeconomic trade-offs and institutional limitations. The following subsections examine these strategies in greater detail, providing the theoretical foundation for evaluating their relationships with sustainable development objectives.

2.1.1 The Inclusion of Natural Capital in the System of National Accounts (SEEA)

Economic activity is fundamentally dependent on natural capital and the environmental resources that support production, consumption and societal well-being. However, the continued exploitation of these resources contributes to environmental depletion and degradation, raising concerns regarding the adequacy of conventional economic indicators for assessing long-term sustainability. Incorporating environmental assets into national accounting systems therefore provides an opportunity to extend economic measurement beyond financial performance and establish a more comprehensive evidence base for environmental decision-making. Obst and Vardon (2014) emphasise the importance of recognising environmental assets within national accounts, particularly where conventional economic indicators provide an incomplete representation of the relationship between economic activity and ecological conditions. Nevertheless, integrating natural capital into economic accounting raises important methodological questions concerning environmental measurement, valuation and the interpretation of ecological changes.

The System of National Accounts (SNA) provides an internationally recognised framework for measuring economic activity, including production, consumption, income and capital accumulation. Gross Domestic Product (GDP) remains one of its most widely used indicators, although economic output does not necessarily reflect environmental sustainability or wider societal well-being. Conventional national accounting has therefore been criticised for its limited capacity to represent the ecological conditions supporting economic development and the environmental consequences associated with resource exploitation (Obst and Vardon, 2014). Although the SNA recognises certain environmental assets, including mineral resources, land and timber, its accounting boundaries do not encompass all ecological processes or benefits provided by natural systems (United Nations et al., 2009). Consequently, increases in economic production may coexist with declining natural capital, illustrating the limitations of relying exclusively on conventional indicators when evaluating sustainable development.

A central challenge concerns the recognition and measurement of environmental assets within economic accounting frameworks. Although national accounts incorporate selected natural resources, the treatment of environmental depletion and degradation remains complex, particularly where environmental services do not have directly observable market prices. Obst and Vardon (2014) identify three interrelated methodological considerations: the scope of environmental asset measurement, the valuation principles applied to natural capital and the treatment of depletion within measures of economic performance. These considerations demonstrate that extending national accounting involves more than recognising additional asset categories; it requires an understanding of how environmental conditions and changes are represented within economic information systems.

The first consideration relates to the scope of environmental asset measurement. Conventional national accounting generally recognises assets within established economic boundaries, whereas broader environmental accounting approaches incorporate ecological processes and ecosystem services that contribute to human well-being without necessarily being exchanged through markets. These include provisioning services, such as food, water and raw materials, alongside other environmental benefits associated with ecosystem functioning. Many ecosystem services exhibit characteristics of public goods, making their measurement and valuation particularly challenging. Although extending accounting boundaries provides a more comprehensive representation

of environmental contributions, it also introduces methodological difficulties associated with data availability, classification and the treatment of non-market environmental benefits (Obst and Vardon, 2014).

The second consideration concerns the monetary valuation of environmental assets. National accounting generally applies exchange-value principles to maintain consistency with established economic measures. However, these principles do not necessarily represent the full societal significance of environmental resources, particularly where ecological benefits extend beyond market transactions. The selection of discount rates creates additional difficulties when environmental impacts occur over extended periods or affect future generations. Differences between private and social discounting approaches may substantially influence estimated environmental values and the relative importance assigned to long-term ecological outcomes. Consequently, accounting consistency should not be interpreted as evidence that monetary valuations adequately capture the ecological, ethical or intergenerational significance of natural capital (Obst and Vardon, 2014).

The third consideration relates to the treatment of environmental depletion within measures of economic performance. GDP primarily measures economic production during a specified period rather than changes in the underlying stocks of assets supporting future economic activity. As a result, resource extraction may contribute positively to measured economic output while simultaneously reducing natural capital. Incorporating information concerning environmental asset stocks, resource depletion and ecological degradation can therefore provide a more complete understanding of the long-term implications of economic development. Nevertheless, translating environmental changes into conventional monetary indicators remains methodologically challenging, particularly where ecological losses cannot be reliably quantified or valued (Obst and Vardon, 2014).

These limitations contributed to the development of the System of Environmental-Economic Accounting (SEEA), which extends conventional economic accounting by integrating environmental information with national economic data. The SEEA originated in the early 1990s and subsequently developed through international statistical cooperation and methodological revisions. Its frameworks provide structured approaches for recording environmental assets, physical resource flows and the relationships between economic activity and environmental systems. Building upon the accounting principles of the SNA, the SEEA incorporates information concerning natural resources, energy, water, emissions and environmental activities. The development of ecosystem accounting has further expanded its scope by providing a framework for assessing ecosystem extent, condition and services (United Nations, 2021).

An important contribution of the SEEA is its use of physical accounting alongside monetary measures. Physical accounts document environmental assets and resource flows through measurable quantities, including water volumes, energy consumption, land areas and material extraction. These measurements provide information concerning environmental stocks, changes in resource availability and the pressures associated with economic activity. The inclusion of physical indicators is particularly significant where ecological conditions cannot be adequately represented through monetary values alone. However, the reliability and usefulness of environmental accounts depend on data quality, methodological consistency and the technical capacity of national statistical institutions (Obst and Vardon, 2014). Ecosystem accounting also extends environmental assessment to services such as resource provision, water purification and recreational benefits, although monetary ecosystem accounts remain subject to valuation boundaries and do not necessarily capture the full significance of ecological and social benefits (United Nations et al., 2003; United Nations, 2021).

Despite these developments, the integration of environmental–economic accounting into mainstream policymaking remains uneven. Obst and Vardon (2014) identify challenges associated with the recognition and use of environmental asset information, while Sagoff (2012) raises broader questions concerning the assumptions underlying environmental valuation. These concerns suggest that the availability of environmental accounts does not automatically translate into environmentally responsible policy decisions. Their practical contribution depends on institutional capacity, political priorities, data accessibility and the willingness of policymakers to incorporate environmental evidence into economic planning. Within the context of the SDGs, the SEEA can support more integrated assessment of environmental and economic conditions; however, its effectiveness should be evaluated in relation to how accounting information informs policy choices rather than through the existence of accounting frameworks alone.

2.1.2 Green Consumerism

Environmental degradation and the pursuit of sustainability have encouraged greater consideration of how production and consumption practices influence ecological conditions and societal well-being. Within this context, businesses are increasingly encouraged to adopt green marketing strategies that promote environmentally preferable products and incorporate environmental considerations into their commercial activities (Dagher and Itani, 2014). While green marketing primarily concerns how businesses communicate and promote environmentally responsible products, green consumerism emphasises the influence of individuals on market demand through their purchasing decisions and consumption practices (Tseng, 2016). Although these approaches are interconnected, their contribution to sustainability depends on whether environmental commitments are reflected in production practices and consumer behaviour rather than promotional claims alone.

Individual consumption patterns contribute to environmental pressures through their influence on resource use, energy consumption and associated ecological impacts. Paetz et al. (2012) examine consumer perceptions of sustainable energy consumption, while

Haytko and Matulich (2008) investigate the relationship between green advertising and environmentally responsible consumer behaviour. Similarly, Wiedenhofer et al. (2017) demonstrate the significance of household consumption patterns in shaping carbon emissions. Collectively, these studies indicate that environmental degradation cannot be attributed exclusively to industrial production or governmental policy, as household consumption also influences environmental outcomes. Nevertheless, the significance of individual purchasing decisions must be considered within broader economic, technological and institutional systems that determine the availability of products, energy sources and consumption alternatives.

Green consumerism refers to consumption practices in which environmental considerations influence the selection and purchase of goods and services. Growing environmental awareness may encourage individuals to favour products perceived as environmentally preferable, while some consumers demonstrate a willingness to pay higher prices for goods associated with reduced ecological impacts (Laroche et al., 2001; Han et al., 2009). Ambec and De Donder (2022) further examine the relationship between green consumerism and environmental policy, highlighting the interaction between consumer preferences, market conditions and regulatory interventions. However, environmental awareness and willingness to purchase green products should not necessarily be interpreted as evidence of sustainable consumption. Purchasing intentions may differ from actual behaviour, particularly where environmentally preferable alternatives are less affordable, less accessible or difficult to distinguish from products supported primarily by environmental marketing claims.

The factors influencing green purchasing behaviour extend beyond environmental awareness to include psychological, social, cultural and economic considerations. Mostafa (2007) identifies environmental knowledge, concern, attitudes and scepticism towards environmental claims as relevant influences on green purchasing decisions. Similarly, Stern (2000) emphasises the importance of personal capabilities, contextual conditions and established habits in shaping environmentally significant behaviour. These perspectives suggest that environmentally responsible consumption cannot be explained solely through individual motivation, as consumer decisions are also influenced by product availability, affordability, cultural expectations and practical opportunities. Perceived environmental responsibility, confidence in the effectiveness of individual actions and the credibility of environmental information may further shape purchasing preferences (Mostafa, 2007; Han et al., 2009). Consequently, environmental concern does not automatically translate into behavioural change, particularly where wider market conditions restrict consumers' capacity to adopt more sustainable practices.

The broader significance of green consumerism lies in its potential to influence production practices and reduce environmental pressures associated with conventional consumption. Elsantil (2021) examines factors influencing green purchasing behaviour, while Paul et al. (2016) investigate environmentally responsible consumption through behavioural theories, reinforcing the importance of understanding the relationship between attitudes, intentions and purchasing decisions. Nevertheless, the environmental effectiveness of green consumerism depends on whether products generate demonstrably lower ecological impacts and whether changes in consumption produce meaningful reductions in resource use, pollution and associated emissions. Consumer-driven approaches may also face limitations where environmentally preferable products remain financially inaccessible or where environmental claims cannot be independently substantiated. Accordingly, green consumerism may contribute to sustainability objectives, particularly those associated with responsible consumption and production, but its effectiveness should be evaluated through actual environmental outcomes rather than purchasing intentions or marketing representations alone.

2.1.3 Fiscal Policy

Fiscal policy represents a central mechanism through which governments influence economic activity by adjusting taxation and public expenditure to support macroeconomic stability (Musgrave and Musgrave 1989). Beyond its conventional role in managing economic fluctuations, fiscal policy enables governments to address unemployment, stimulate economic activity and influence broader development priorities (Battaglini and Coate, 2015). During economic downturns, governments may increase public expenditure to stimulate demand and support economic recovery. However, the implications of fiscal interventions extend beyond their immediate stabilisation effects, as changes in the allocation and composition of government spending may generate longer-term economic and environmental consequences. López et al. (2011) emphasise the importance of examining both the level and composition of fiscal expenditure, suggesting that its effectiveness should be assessed in relation to wider development objectives rather than short-term economic performance alone.

In addition to supporting macroeconomic stability, fiscal policy can address structural challenges associated with healthcare, education, poverty reduction and environmental degradation. Government expenditure and taxation influence the allocation of resources towards activities that may support wider social and environmental objectives, although their effectiveness depends on the design and implementation of specific interventions (López et al., 2011). Within developing economies, Huynh and Nguyen (2019) examine fiscal policy and the shadow economy across 22 developing Asian countries between 2002 and 2015, highlighting the relationship between government intervention and wider economic conditions. Nevertheless, the environmental implications of fiscal policy cannot be assumed to be uniformly positive, as changes in public expenditure may influence pollution through different economic mechanisms. Antweiler et al. (2001) identify three relevant mechanisms through which economic activity affects environmental quality: scale, composition and technique effects. Although developed in the context of trade and environmental outcomes, this framework provides a useful analytical basis for considering the environmental implications of fiscal interventions.

The scale effect occurs when increased economic activity leads to higher production, resource consumption and potentially greater pollution, assuming other conditions remain unchanged. Consequently, fiscal interventions intended to stimulate economic development may intensify environmental pressures where economic expansion is not accompanied by improvements in resource efficiency or pollution control. The composition effect, by contrast, concerns changes in the relative importance of different economic sectors. Government expenditure directed towards education, healthcare and other human capital-intensive activities may encourage structural changes towards sectors that are generally less pollution-intensive than industries dependent on substantial resource extraction and physical capital (Huynh and Nguyen, 2019; Mani and Wheeler, 1998). However, such improvements cannot be assumed, as their environmental consequences depend on the characteristics of the sectors receiving investment and the wider organisation of economic activity.

The technique effect refers to changes in the environmental intensity of production, particularly reductions in pollution generated per unit of economic output. Public investment in research, technological development and environmental infrastructure may encourage cleaner production methods and improve resource efficiency. López et al. (2011) examine the relationship between fiscal expenditure and environmental outcomes, highlighting the importance of considering how government spending influences economic activity and pollution. Fiscal policy may also generate an income effect, whereby improvements in economic conditions increase public demand for environmental quality and strengthen support for environmental protection. Nevertheless, higher income does not automatically produce ecological improvements, particularly where greater purchasing power encourages additional resource-intensive consumption. Accordingly, the environmental effectiveness of fiscal interventions depends on the interaction between economic expansion, sectoral changes, technological development and public environmental priorities.

The global economic downturn of 2008–2009 provides an example of the broader role of fiscal intervention, as governments, including those of the United States and China, introduced substantial stimulus measures to support economic recovery. Such interventions created opportunities to direct public expenditure towards infrastructure, social development and potentially less resource-intensive economic activities. López et al. (2011) demonstrate the importance of considering expenditure composition when examining environmental outcomes, although the environmental implications of individual stimulus programmes require separate empirical assessment. Public expenditure directed towards cleaner technologies and environmental infrastructure may contribute to sustainability objectives, whereas spending that reinforces resource-intensive production may increase ecological pressures. Fiscal policy should therefore be understood as a context-dependent environmental economic instrument whose contribution to the SDGs depends on expenditure priorities, institutional capacity, regulatory effectiveness and the balance between economic, social and environmental objectives.

2.1.4 Degrowth Economic Model

Degrowth represents an alternative economic perspective that challenges the conventional prioritisation of continuous economic expansion by emphasising ecological limits, resource sufficiency and societal well-being. Rather than treating increased production and profitability as the principal indicators of economic success, degrowth calls for reconsideration of how resources are distributed, economic activities are organised and collective welfare is supported. Plaza-Úbeda et al. (2020) examine the contribution of systems thinking to sustainability within degrowth-oriented organisational contexts, highlighting the interdependence of economic, environmental and social systems. Similarly, Vazquez-Brust and Plaza-Úbeda (2021) discuss the relationship between green growth, degrowth and sustainability, emphasising the importance of reconciling economic activity with ecological constraints. However, degrowth should not be understood simply as an economic contraction or as a strategy for improving organisational efficiency. Its broader significance lies in questioning growth-dependent structures and examining whether social well-being can be maintained or improved while reducing environmental pressures. Such a transition presents substantial challenges where employment, public revenues, business profitability and institutional arrangements remain dependent on economic expansion.

The application of degrowth principles within organisational management requires reconsideration of interconnected subsystems, including strategic management, operations, financial and accounting management, marketing and human resource management. Strategic management is particularly important because it establishes organisational priorities and influences how economic, social and environmental objectives are incorporated into decision-making. Stakeholder participation may support the development of more inclusive objectives by encouraging collaboration among organisations, employees, communities and other interested groups. Plaza-Úbeda et al. (2020) associate sustainability-oriented organisational approaches with stakeholder integration and collaborative value creation, while Sorman and Giampietro (2013) emphasise the biophysical constraints affecting economic systems. Nevertheless, stakeholder engagement and corporate social responsibility are not exclusive to degrowth and do not necessarily challenge the pursuit of continuous economic expansion. Their relevance to degrowth therefore depends on whether participation influences substantive decisions concerning resource use, production levels, distributional responsibilities and ecological limits. Moreover, competing interests and unequal decision-making power may constrain the extent to which collective objectives are translated into organisational practice.

Operations management represents another important dimension of degrowth-oriented organisational change. Conventional operational priorities frequently emphasise efficiency, productivity, quality and innovation, whereas degrowth requires these

objectives to be assessed in relation to ecological limits and the absolute environmental consequences of production. Corbett (2009) examines sustainable operations management, highlighting the relevance of environmental considerations to organisational processes and decision-making. Within degrowth discussions, resource extraction and waste generation are evaluated in relation to the regenerative and absorptive capacities of ecological systems (Latouche, 2009). These principles suggest that operational performance should not be assessed exclusively through reduced costs or increased output, but also through resource sufficiency, environmental impacts and the scale of production. Plaza-Úbeda et al. (2020) emphasise the importance of aligning organisational subsystems with wider sustainability objectives. However, improvements in resource efficiency may be insufficient where increased production or consumption offsets the environmental benefits achieved. Consequently, the distinction between relative efficiency improvements and absolute reductions in ecological pressures remains fundamental to evaluating the practical contribution of degrowth-oriented operations.

Financial and accounting management also requires reconsideration within degrowth-oriented economic models, particularly where conventional financial systems prioritise profitability, capital accumulation and continued expansion. Alternative approaches seek to incorporate social responsibilities, environmental limitations and collective well-being into organisational performance assessment. Felber (2015), for example, proposes the Economy for the Common Good, including assessment mechanisms such as the Common Good Matrix, to evaluate organisational activities against wider social and ethical considerations. Although this framework shares certain normative concerns with degrowth, it should not be treated as an equivalent economic model. Plaza-Úbeda et al. (2020) similarly discuss the importance of integrating financial and accounting practices within broader sustainability-oriented organisational systems, while Vazquez-Brust and Plaza-Úbeda (2021) consider the relationship between organisational activities and ecological objectives. Nevertheless, incorporating social and environmental indicators into financial reporting does not necessarily alter investment priorities or reduce dependence on economic growth. The effectiveness of alternative financial approaches therefore depends on whether their principles influence resource allocation, organisational accountability and decisions concerning the scale and purpose of economic activity.

Marketing constitutes a further organisational dimension through which degrowth principles may challenge conventional production and consumption practices. Traditional marketing frequently seeks to stimulate demand and increase sales, potentially reinforcing consumption patterns associated with resource depletion and environmental degradation. Sustainability-oriented marketing may encourage environmentally responsible purchasing, but degrowth extends beyond the substitution of conventional products with environmentally preferable alternatives. Lorek and Fuchs (2013) examine sustainable consumption governance in relation to degrowth, highlighting the importance of addressing the structural conditions shaping consumption rather than relying exclusively on individual purchasing decisions. Vazquez-Brust and Plaza-Úbeda (2021) further discuss the relationship between business activities and sustainability-oriented organisational transformation. Nevertheless, a fundamental tension remains between commercial strategies designed to expand consumption and degrowth objectives concerned with reducing excessive resource use. Consequently, marketing practices aligned with degrowth require consideration of product longevity, sufficiency, reduced material demand and the wider social purposes of consumption, rather than assuming that green marketing alone constitutes a meaningful transition towards ecological sustainability.

Finally, human resource management is central to evaluating the social implications of degrowth, particularly because reduced economic activity may affect employment, income security and working conditions. Gomez-Mejia et al. (2012) discuss the role of human resource management in coordinating organisational capabilities and employment practices, providing a broader managerial foundation for considering workforce-related changes. Within degrowth debates, proposals such as reduced working hours, redistribution of employment and stronger social protection seek to reconcile ecological objectives with human well-being. Alcott (2013) examines the potential role of a Job Guarantee in degrowth-oriented economic arrangements, raising questions concerning employment security and the institutional conditions necessary for implementation. Although these measures may offer opportunities to improve work–life balance and reduce economic insecurity, their effectiveness depends on financing arrangements, labour-market conditions, public service provision and the environmental implications of employment-related activities. Accordingly, degrowth-oriented human resource management must address the potential tension between reducing resource-intensive economic activity and maintaining adequate employment opportunities, social protection and economic security, particularly in developing countries where institutional and financial capacities may be more constrained.

2.2 The Sustainable Development Goals (SDGs)

The Sustainable Development Goals (SDGs), adopted by the United Nations in September 2015, establish an international framework for addressing interconnected environmental, economic and social challenges. Forming the foundation of the 2030 Agenda for Sustainable Development, the SDGs articulate a shared vision for promoting more equitable, resilient and environmentally sustainable development by 2030 (United Nations, 2018). The framework comprises 17 goals: (1) No Poverty, (2) Zero Hunger, (3) Good Health and Well-being, (4) Quality Education, (5) Gender Equality, (6) Clean Water and Sanitation, (7) Affordable and Clean Energy, (8) Decent Work and Economic Growth, (9) Industry, Innovation and Infrastructure, (10) Reduced Inequalities, (11) Sustainable Cities and Communities, (12) Responsible Consumption and Production, (13) Climate Action, (14) Life Below Water, (15) Life on Land, (16) Peace, Justice and Strong Institutions, and (17) Partnerships for the Goals (United Nations, 2015). These goals are supported by 169 targets intended to guide implementation and facilitate the assessment of progress across different geographical and developmental contexts. However, the goals should not be interpreted as independent policy

priorities, as progress towards one objective may influence outcomes associated with others (Hutton et al., 2018). Their implementation therefore requires consideration of the wider consequences of individual development interventions.

A distinguishing characteristic of the SDGs is their commitment to universality and indivisibility. Universality establishes that the goals apply to all countries, irrespective of their economic circumstances or existing sustainability performance, while indivisibility recognises that environmental, economic and social objectives require integrated consideration. Bennich et al. (2020) examine interactions between the SDGs, demonstrating the importance of understanding how progress in one area may support or constrain achievements elsewhere. Nevertheless, universal applicability does not imply uniform implementation conditions. Differences in institutional capacity, financial resources, environmental pressures and socioeconomic circumstances influence how governments prioritise and pursue individual objectives. Consequently, the SDGs provide a common international framework while requiring context-sensitive approaches that respond to national and regional development conditions.

The interconnected nature of the SDGs has encouraged research examining their relationships through different disciplinary and analytical perspectives. Cordova and Celone (2019) explore the relationship between the SDGs and innovation within business contexts, while Nerini et al. (2019) investigate the interactions between climate action and other sustainable development objectives. Such studies demonstrate the relevance of examining sustainability through interconnected systems rather than isolated policy areas. Researchers have also proposed different classifications of the SDGs according to shared characteristics, sustainability dimensions, technological priorities and potential impacts (Muff et al., 2017; Walz et al., 2017; Pedersen, 2018). These approaches can assist in identifying relationships between objectives, although their analytical usefulness depends on the assumptions and criteria underpinning each classification. Accordingly, classifications should be regarded as interpretative tools rather than definitive representations of the SDG framework, particularly where they may overlook competing priorities or context-specific interactions.

Environmental sustainability provides a particularly relevant example of these interdependencies. Climate action (SDG 13), life below water (SDG 14) and life on land (SDG 15) are closely connected to resource management, energy systems and economic development. Similarly, access to affordable and clean energy (SDG 7) and clean water and sanitation (SDG 6) may contribute to improved health and well-being (SDG 3), while influencing infrastructure development (SDG 9), sustainable cities (SDG 11) and responsible consumption and production (SDG 12). Walz et al. (2017) examine the contribution of technological innovation to environmentally oriented SDGs, highlighting its potential relevance to multiple sustainability objectives. However, technological development and infrastructure expansion may also generate additional resource demands, environmental pressures and distributional consequences. These relationships demonstrate that progress towards individual SDGs cannot automatically be interpreted as beneficial across the entire framework. Environmental economic strategies must therefore be assessed in relation to both their potential synergies and the trade-offs arising between economic development, ecological protection and social well-being.

Despite differences in their interpretation and implementation, the SDGs provide a common framework for examining the relationship between environmental protection, resource management and human development. Zhang et al. (2016) advocate a systems-oriented understanding of sustainable development, particularly where resource scarcity creates interdependencies between environmental and socioeconomic objectives. Nevertheless, the adoption of internationally recognised goals does not guarantee their achievement. Effective implementation requires institutional coordination, appropriate policy instruments, financial and technical capacity, and mechanisms for evaluating environmental and socioeconomic outcomes. Within this context, environmental economics provides several approaches through which resource allocation, economic incentives and development priorities may be examined in relation to the SDGs. The System of Environmental-Economic Accounting (SEEA), green consumerism, fiscal policy and degrowth offer different mechanisms for addressing sustainability challenges, although their contributions must be evaluated in relation to implementation conditions, potential trade-offs and demonstrated outcomes rather than conceptual associations alone.

3. Methodology

This study adopts a critical literature-based approach to examine the relationships between environmental economics and the United Nations Sustainable Development Goals (SDGs), focusing on four environmental economic approaches: the System of Environmental-Economic Accounting (SEEA), green consumerism, fiscal policy and degrowth. Building upon existing scholarship, the review critically examines the conceptual relationships, potential contributions, implementation barriers and socioeconomic consequences associated with these approaches, with particular consideration of developing-country contexts.

The methodology is organised around three interconnected analytical activities: literature identification and selection, thematic classification and comparative analysis, and synthesis and critical discussion. The authors conducted a structured literature search and screening process to identify relevant academic and institutional publications. The selected literature was subsequently examined to evaluate competing perspectives, distinguish anticipated sustainability benefits from empirically demonstrated outcomes, and identify the conditions influencing implementation.

The study is positioned as an original critical literature-based review incorporating a structured search and qualitative comparative synthesis. Although the authors independently conducted the literature identification and screening process, the study does not claim to provide a quantitative meta-analysis or an independent empirical evaluation of environmental economic interventions. Its conclusions are interpretative and depend upon the scope, quality and relevance of the examined literature.

3.1 Literature Identification and Selection

The literature examined in this study addresses the relationship between environmental economics and the SDGs, with particular emphasis on four approaches: SEEA, green consumerism, fiscal policy and degrowth. These approaches represent different dimensions of environmental economic thinking, encompassing environmental measurement, consumer behaviour, governmental intervention and alternative models of economic development.

Literature was considered according to its relevance to the research aim and questions, particularly its examination of the conceptual foundations of environmental economics, the potential environmental and socioeconomic implications of the selected approaches, the barriers influencing implementation and measures proposed for addressing these challenges. The review incorporates English-language academic journal articles, books and publications issued by governmental and international institutions, without applying a specific publication-year restriction. Sources addressing environmental economics or the SDGs only incidentally were considered outside the principal analytical scope.

The literature provides a basis for comparing the theoretical foundations, potential contributions, limitations and implementation conditions associated with the four environmental economic approaches. Particular attention is given to institutional capacity, economic conditions, governance arrangements and socioeconomic inequalities, especially within developing-country contexts.

3.2 The First Step: Literature Search Documentation and Screening

The literature identification process was conducted by the authors to identify relevant academic publications examining the relationships between environmental economics and the Sustainable Development Goals (SDGs). The literature search involved Web of Science (WoS) and Scopus, using terms such as “environmental economics”, “environmental problems”, “environmental-accounting system”, “SEEA”, “national accounts”, “green consumerism”, “fiscal policy” and “degrowth”, combined with broader expressions including “sustainability”, “sustainable development goals” and “sustainable economy”. Boolean operators (AND/OR) were employed to identify potentially relevant publications.

The database searches were conducted between 7 June 2026 and 15 October 2026. The initial search identified 370 records before duplicate removal. Records retrieved from both databases were consolidated into a single reference register to facilitate identification and screening. Potential duplicate records were assessed through comparisons of publication titles, author names, publication years and Digital Object Identifiers (DOIs), where available. Where duplicate entries were identified, a single bibliographic record was retained for subsequent screening. However, the exact number of duplicate records removed was not documented separately. Duplicate identification and preliminary citation screening therefore formed part of the initial selection stage, followed by title and abstract assessment and full-text evaluation.

The literature selection process emphasised relevance to environmental economics, the SDGs and the four principal approaches examined in this review. Particular attention was given to publications addressing environmental economic theory, environmental and socioeconomic implications, policy implementation, institutional constraints and proposed responses to sustainability challenges. Sources whose primary focus fell outside these areas were excluded from the principal analysis.

Following the initial identification of 370 records, 200 were retained after duplicate identification and preliminary citation screening. Subsequent title and abstract assessment resulted in 130 publications being retained for further consideration, while full-text assessment reduced the final selection to 81 publications, as summarised in Table 1. These publications provided the literature base for examining the conceptual relationships, potential contributions, implementation barriers and socioeconomic consequences associated with the four environmental economic approaches.

Table 1. Literature Search Strategy and Screening Process for the Present Review.

Selection component	Description
Publication sources	Academic journal articles, books, official publications and reports issued by governmental bodies and relevant institutions.
Databases consulted	Web of Science (WoS) and Scopus.
Search period	7 June 2026–15 October 2026.

Search strategy	Combinations of the following terms using Boolean operators (AND/OR): "environmental economics", "environmental problems", "environmental-accounting system", "SEEA", "national accounts", "green consumerism", "fiscal policy", "degrowth", "sustainability", "sustainable development goals" and "sustainable economy".
Search scope and eligibility	English-language publications addressing environmental economics and sustainability. Eligible sources included academic articles, books, government publications and institutional reports, without restrictions on publication year.
Initial records identified before duplicate removal	370
Papers retained after: • **Records retained after duplicate identification and preliminary citation screening** • **Records retained after title and abstract screening** • **Records retained following full-text assessment**	 200 130 81

Note: *The literature search and screening process was conducted by the authors for the present review. The initial 370 records were identified before duplicate removal. Duplicate identification and preliminary citation screening formed part of the initial selection stage, after which 200 records were retained. The number of duplicate records removed was not documented separately. Subsequent screening resulted in 130 publications being retained following title and abstract assessment and 81 publications following full-text evaluation.*

3.3 The Second Step: Thematic Classification and Comparative Analysis

The second stage involved organising and examining the literature according to six interconnected analytical categories: environmental economics, environmental-economic accounting, green consumerism, fiscal policy, degrowth and the SDGs. Within this framework, SEEA, green consumerism, fiscal policy and degrowth constituted the four principal approaches examined in relation to sustainable development.

The analysis addressed four dimensions corresponding to the research questions: (1) the conceptual relationships between environmental economics and the SDGs; (2) the potential contributions and limitations of the selected approaches; (3) the economic, social, institutional and practical barriers influencing implementation, including unintended consequences; and (4) measures proposed in the literature for addressing these challenges.

The comparative analysis considered the mechanisms through which each approach may contribute to sustainability objectives. SEEA was examined in relation to environmental accounting, natural capital measurement and decision-making; green consumerism in relation to consumer behaviour and market incentives; fiscal policy through taxation, public expenditure and policy instruments; and degrowth through its reconsideration of economic expansion, resource consumption and ecological limits.

Particular attention was given to distinguishing conceptual arguments and anticipated sustainability benefits from outcomes supported by empirical evidence. The analysis also considered institutional capacity, resource availability, regulatory effectiveness, policy design and socioeconomic conditions, particularly within developing-country contexts.

Following the literature identification and screening process, 81 publications were retained for consideration in the review. Of these, 59 publications were prioritised for detailed thematic classification based on their direct relevance to the research questions, substantive contributions to the four environmental economic approaches and usefulness for examining potential sustainability benefits, implementation barriers and socioeconomic consequences. This selection provided a focused analytical representation of the most pertinent literature rather than an exhaustive classification of all retained sources. The remaining 22 publications were not included in Table 2; therefore, the table represents a focused thematic overview rather than an additional formal screening stage. Publications could be assigned to more than one of the six analytical categories where their content addressed overlapping themes.

These classifications indicate thematic relevance and do not constitute formal methodological quality scores or quantitative measures of evidential strength.

Table 2. Thematic Classification of 59 Prioritised Publications from the Literature Review.

Author(s) / Institutional Author	Publication Year	Source Type	Environmental Economics	Environmental-Economic Accounting (SEEA)	Green Consumerism	Fiscal Policy	Degrowth	Sustainable Development Goals (SDGs)
Huynh, C.M.	2020	Journal				C		
Biswas et al.	2012	Journal				C		
Pirmana et al.	2020	Journal		C				
Obst and Vardon	2014	Journal		C				
Sachs, J.D.	2012	Journal						C
Mio et al.	2020	Journal						C
United Nations	2015	Report						C
Beder	2011	Journal	C					
Medina and Schneider	2018	Journal				C		
Ambec and De Donder	2022	Journal			C			
Ulph and Ulph	2021	Journal	C					
Field and Field	2017	Book	C					
Pearce	2002	Journal	C					
Sagoff	2012	Journal	C					
Nadeau	2015	Journal	C					
Lélé	1991	Journal						C
Venkatachalam	2006	Journal	C					
Kahneman and Knetsch	1992	Journal	C					
Beder	1996	Journal				C		
Musgrave and Musgrave	1989	Book				C		
Plaza-Úbeda et al.	2020	Journal					C	
Jakob and Edenhofer	2014	Journal			C		C	
Vardon et al.	2018	Journal		C				
Bawankare	2019	Book		C				
The UN and Accounting	2010	Book		C				
The UN	2003	Book		C				
Dagher and Itani	2014	Journal			C			
Tseng	2016	Journal			C			
Paetz et al.	2012	Journal			C			
Haytko and Matulich	2008	Journal			C			
Wiedenhofer et al.	2017	Journal			C			
Han et al.	2009	Journal			C			
Laroche et al.	2001	Journal			C			
Mostafa	2007	Journal			C			
Stern	2000	Journal			C			
Elsantil	2021	Journal			C			
Paul et al.	2016	Journal			C			
Pearson	2010	Journal						C

Author(s) / Institutional Author	Publication Year	Source Type	Environmental Economics	Environmental-Economic Accounting (SEEA)	Green Consumerism	Fiscal Policy	Degrowth	Sustainable Development Goals (SDGs)
Battaglini and Coate	2015	Journal				C		
Galinato and Islam	2014	Journal				C		
Huynh and Nguyen	2019	Journal				C		
Antweiler et al.	2001	Journal				C		
Mani and Wheeler	1998	Journal				C		
Vazquez-Brust and Plaza-Úbeda	2021	Journal					C	
Plaza-Úbeda et al.	2009	Journal					C	
Sorman and Giampietro	2013	Journal					C	
Corbett	2009	Journal					C	
Latouche	2009	Book					C	
Felber	2015	Book					C	
Lorek and Fuchs	2013	Journal					C	
Gomez-Mejia et al.	2012	Book					C	
Alcott	2013	Journal					C	
The United Nations	2018	Report						C
Hutton et al.	2018	Journal						C
Bennich et al.	2020	Journal						C
Cordova and Celone	2019	Journal						C
Nerini et al.	2019	Journal						C
Muff et al.	2017	Journal						C
Walz et al.	2017	Journal						C

Note: *C indicates that a publication was classified as relevant to the corresponding analytical category. The table presents 59 publications prioritised from the 81 retained following literature screening. Publications may be associated with more than one category. The classification is descriptive and does not represent a formal assessment of methodological quality or evidential strength.*

3.4 The Third Step: Synthesis and Critical Discussion

The final stage involved synthesising the examined literature to critically evaluate the relationships between environmental economics and the SDGs. The synthesis focused on broad SDG-level relationships rather than systematically assessing each of the 169 individual targets. Particular attention was given to potential contributions, synergies, trade-offs, implementation barriers and socioeconomic consequences associated with the four environmental economic approaches.

The synthesis was structured around the four research questions. First, it examined the conceptual relationships between environmental economics and sustainable development. Second, it evaluated the potential contributions and limitations of SEEA, green consumerism, fiscal policy and degrowth in relation to the SDGs. Third, it considered the principal economic, social, institutional and practical barriers affecting implementation, including unintended consequences. Finally, it examined measures proposed in the literature for addressing these challenges, particularly within developing-country contexts.

A comparative perspective was adopted to identify areas of convergence, disagreement and potential tensions across the four approaches. Particular attention was given to distinguishing theoretical propositions from empirically supported findings and examining how institutional capacity, economic conditions, resource availability, regulatory effectiveness and policy design may influence implementation outcomes.

The synthesis also considered limitations within the examined scholarship, including differences in theoretical assumptions, geographical coverage and methodological approaches. These considerations informed the interpretation of the findings and the identification of areas requiring further investigation, particularly concerning the practical implementation and measurable environmental and socioeconomic consequences of the selected approaches.

The overall methodological framework, comprising literature identification and selection, thematic classification and comparative analysis, and synthesis and critical discussion, is illustrated in Figure 1.

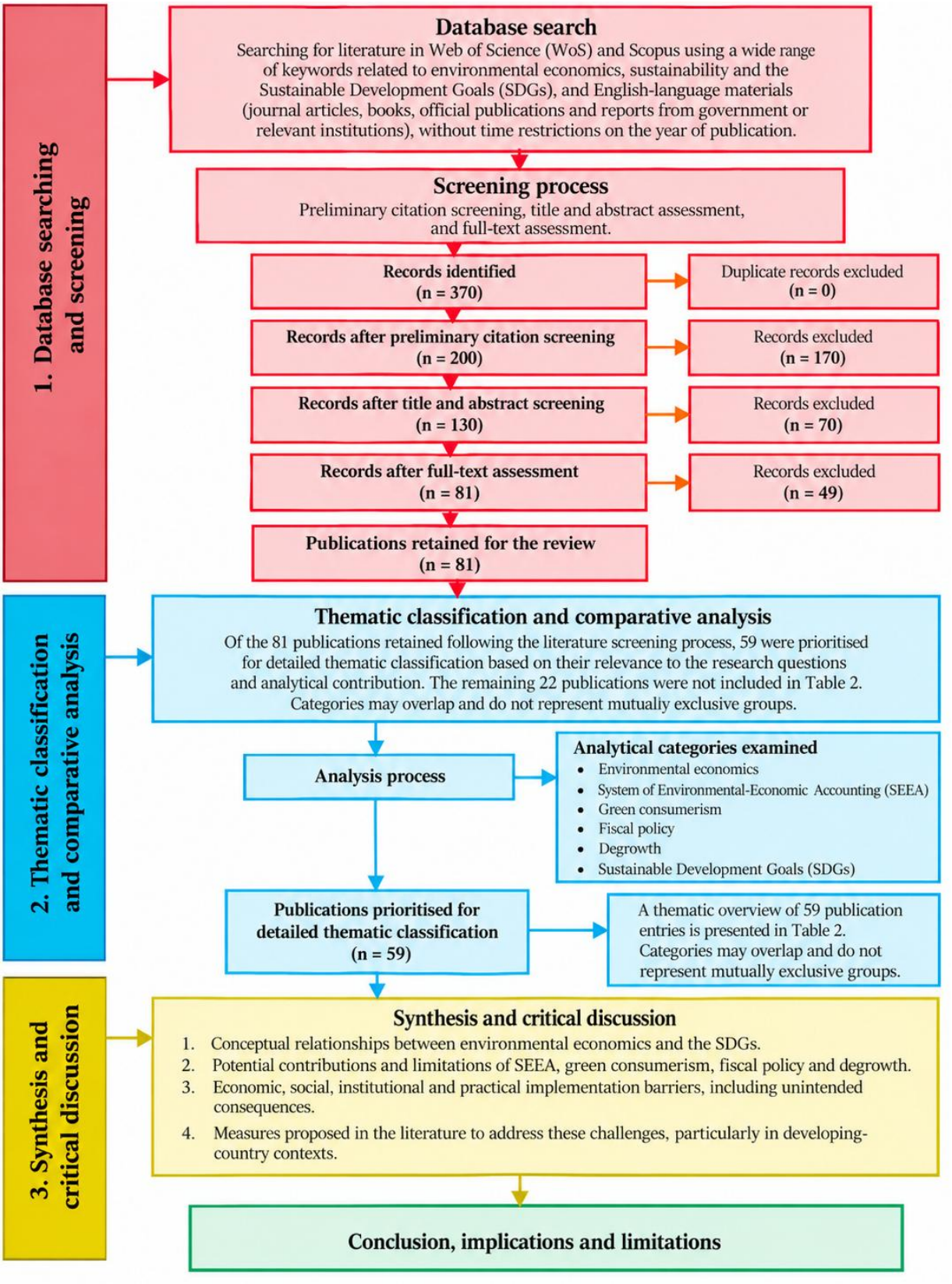


Figure 1: *Methodological framework of the original critical literature-based review, illustrating three interconnected analytical stages: (1) literature identification and selection, (2) thematic classification and comparative analysis, and (3) synthesis and critical discussion. The framework represents the structured research process undertaken by the authors to identify, examine and critically synthesise relevant literature concerning environmental economics and the Sustainable Development Goals.*

4. Findings

This section examines the relationships between four environmental economic strategies and the Sustainable Development Goals (SDGs): the integration of natural capital into national accounting through the System of Environmental-Economic Accounting (SEEA), green consumerism, fiscal policy and the degrowth economic model. The findings consider how these approaches may contribute to sustainable development objectives while identifying the potential barriers, limitations and consequences associated with their implementation. Furthermore, the discussion considers possible measures for addressing these challenges, recognising that the effectiveness of environmental economic strategies depends on their application within different economic, institutional and environmental contexts.

4.1 The Relationship Between Natural Capital Accounting (SEEA) and the Sustainable Development Goals (SDGs)

The relationship between natural capital accounting and the Sustainable Development Goals (SDGs) is primarily associated with the capacity of the System of Environmental-Economic Accounting (SEEA) to provide information on environmental resources, ecosystem conditions and their interactions with economic activity. Obst and Vardon (2014) examine the recording of environmental assets within national accounting systems, highlighting the importance of recognising natural resources and ecological conditions when evaluating economic performance. Through physical accounting measures, including quantities of fish and mineral resources, volumes of water and timber, and areas of land, SEEA can contribute to the monitoring of environmental conditions relevant to SDG 14 (Life Below Water) and SDG 15 (Life on Land). Such information may assist policymakers in identifying resource depletion, ecosystem degradation and changes in environmental asset availability, thereby supporting decisions concerning conservation and sustainable resource management. Nevertheless, the compilation of environmental accounts does not itself guarantee improved ecological conditions. Their contribution to the SDGs depends on whether accounting information is incorporated into environmental governance, economic planning and resource management decisions. Consequently, SEEA should be understood primarily as an information and decision-support framework rather than a direct mechanism for achieving environmental protection.

Beyond natural resource measurement, environmental-economic accounting provides opportunities to examine ecosystem services and their implications for human well-being. Regulating ecosystem services, including flood protection, water purification and air filtration, illustrate how environmental conditions may influence several development objectives. Flood protection, for example, has potential relationships with SDG 1 (No Poverty) and SDG 3 (Good Health and Well-being), as environmental hazards may affect housing, livelihoods, physical safety and psychological well-being (United Nations, 2018). Reducing exposure to flooding may help protect household resources, limit economic disruption and support more secure living conditions. However, improvements in ecosystem protection do not necessarily translate directly into poverty reduction or better health outcomes. Their wider socioeconomic benefits depend on factors such as income distribution, access to healthcare, employment opportunities and the effectiveness of public institutions. Accordingly, SEEA may support the identification and assessment of ecosystem services relevant to these objectives, but measurable progress requires the translation of environmental information into appropriate conservation, infrastructure and social policies.

Water purification and air filtration provide further examples of the relationship between ecosystem services and the SDGs. Water purification is directly relevant to SDG 6 (Clean Water and Sanitation), while both water and air quality have implications for SDG 3 (Good Health and Well-being). Environmental deterioration may increase exposure to contaminated water and atmospheric pollution, potentially affecting public health, employment conditions and economic performance. Xue et al. (2021) examine the relationship between air pollution and firm performance, indicating that environmental conditions may influence economic activity beyond their immediate ecological consequences. Poor air quality may also affect the attractiveness of particular locations to workers and businesses, although such outcomes depend on labour-market conditions, individual mobility and wider socioeconomic circumstances. These relationships suggest that environmental degradation can generate interconnected ecological, social and economic consequences. Nevertheless, identifying such relationships through environmental-economic accounting does not establish that accounting practices independently improve health or economic outcomes. Rather, SEEA may strengthen the evidence available for understanding these interactions and informing policy responses. Its contribution to sustainable development therefore depends on the quality of environmental information, its integration into decision-making and the effectiveness of subsequent interventions.

4.2 The Relationship Between Green Consumerism and the Sustainable Development Goals (SDGs)

The relationship between green consumerism and the Sustainable Development Goals (SDGs) is particularly evident in its potential to influence environmentally responsible production and consumption practices. Ambec and De Donder (2022) examine the interaction between environmental policy and green consumerism, highlighting how environmentally motivated purchasing preferences may influence market behaviour and environmental outcomes. Within this context, consumer demand for products associated with lower environmental impacts may encourage businesses to reconsider production methods, resource consumption and emissions, establishing a potential relationship with SDG 13 (Climate Action). However, this relationship should not be interpreted as evidence that environmentally preferable purchasing decisions necessarily generate measurable reductions in greenhouse gas emissions. Their effectiveness depends on the environmental performance of the products concerned, the scale of changes in consumption and the extent to which businesses respond through substantive improvements in production practices. Furthermore, price differences, product accessibility and established purchasing habits may constrain the adoption of environmentally preferable alternatives, particularly among consumers facing financial limitations. Consequently, green consumerism may support climate-related objectives, but its contribution depends on changes in actual environmental performance rather than consumer preferences or marketing claims alone.

Green consumerism may also be associated with SDG 3 (Good Health and Well-being), particularly through consumer preferences concerning environmental quality, food consumption and perceived personal responsibility. Environmentally motivated individuals may engage in practices such as reducing energy consumption, recycling and selecting products associated with lower ecological impacts. Such activities may reinforce perceptions of individual responsibility and social contribution, although their psychological benefits cannot be assumed to occur uniformly. Wang et al. (2020) examine green food consumption and social trust, providing insight into the factors associated with consumer preferences for products perceived as environmentally responsible and beneficial to health. However, the relationship between environmentally preferable food products and improved health outcomes requires careful interpretation. Products marketed as green, organic or environmentally responsible do not necessarily possess superior nutritional characteristics or generate demonstrable health benefits. Accordingly, the relationship between green consumerism and SDG 3 should be evaluated through the actual health and environmental characteristics of consumption practices rather than relying exclusively on consumer perceptions, purchasing intentions or promotional representations.

The relationship between green consumerism and SDG 12 (Responsible Consumption and Production) extends beyond individual purchasing decisions to the environmental responsibilities of businesses and other economic actors. Consumer expectations, together with pressures from investors, financial institutions and wider stakeholder groups, may encourage organisations to reconsider their environmental performance and adopt more responsible production practices. Allen and Craig (2016) examine corporate social responsibility in relation to climate change, highlighting the importance of organisational commitments to environmental challenges. Within this context, Corporate Social Responsibility (CSR) may provide a mechanism through which businesses respond to environmental expectations by reconsidering product development, resource management and manufacturing processes. Nevertheless, corporate sustainability commitments do not necessarily result in measurable improvements, particularly where environmental claims are used primarily to strengthen organisational reputation. The potential for greenwashing therefore raises concerns about the credibility of sustainability-related communication and the ability of consumers to distinguish genuine environmental improvements from promotional representations. Consequently, progress towards SDG 12 depends on the interaction between consumer behaviour, corporate accountability and effective environmental governance, with particular emphasis on demonstrable reductions in resource consumption, waste generation and ecological impacts.

4.3 The Relationship Between Fiscal Policy and the Sustainable Development Goals (SDGs)

Fiscal policy may contribute to the achievement of the Sustainable Development Goals (SDGs) through taxation, public expenditure and financial incentives that influence production, consumption and environmental performance. Environmental taxes, particularly those targeting pollution and greenhouse gas emissions, can encourage businesses and consumers to reconsider resource-intensive activities by incorporating environmental costs into economic decision-making. These mechanisms establish potential relationships with SDG 13 (Climate Action) and SDG 3 (Good Health and Well-being), particularly where reductions in emissions and atmospheric pollution contribute to improved environmental quality and reduced exposure to health risks. López et al. (2011) examine the environmental implications of fiscal spending, highlighting the importance of government intervention and the relationship between economic activity and pollution. Nevertheless, the effectiveness of environmental taxation depends on the responsiveness of businesses and consumers, the availability of less polluting alternatives and the consistency of regulatory enforcement. Furthermore, taxation may generate uneven socioeconomic consequences where households or businesses have limited financial capacity to adapt. Consequently, the relationship between fiscal policy and SDGs 3 and 13 should be understood as conditional on policy design, institutional effectiveness and the extent to which financial incentives generate measurable environmental improvements.

Public expenditure represents another mechanism through which fiscal policy may support sustainable development objectives. Government investment in renewable energy, energy-efficient infrastructure, public transport and environmentally responsible urban development may contribute to SDG 7 (Affordable and Clean Energy), SDG 9 (Industry, Innovation and Infrastructure) and SDG 11 (Sustainable Cities and Communities). Such expenditure can potentially facilitate technological development, improve access to essential infrastructure and reduce dependence on environmentally damaging production and consumption systems. López

et al. (2011) provide a basis for examining how the composition of public spending may influence environmental outcomes, suggesting the importance of considering not only the scale of government expenditure but also the activities towards which financial resources are directed. However, public investment does not necessarily generate equivalent environmental benefits across different institutional and economic contexts. Its effectiveness depends on project selection, implementation capacity, infrastructure maintenance and the extent to which investments address existing environmental and social needs. Moreover, public expenditure may involve competing priorities, particularly in developing countries where governments must balance environmental objectives with demands for healthcare, education, housing and economic development. Accordingly, fiscal policy may support several SDGs simultaneously, but its contribution depends on the strategic allocation of resources and the management of trade-offs between environmental protection and socioeconomic priorities.

The relationship between fiscal policy and sustainable development also extends to income distribution, poverty reduction and social equity. Environmental taxes may generate public revenues that can be redirected towards social protection, essential services or financial assistance for households facing the costs of environmental transitions, establishing potential connections with SDG 1 (No Poverty) and SDG 10 (Reduced Inequalities). Nevertheless, the distributional consequences of environmental taxation require careful consideration, particularly where lower-income households spend a relatively large proportion of their income on energy, transport and other essential goods. Without compensatory measures, environmental taxes may increase financial pressures on economically vulnerable populations, potentially creating tensions between ecological objectives and social development priorities. Furthermore, the interaction between taxation and subsidy arrangements may generate unintended environmental consequences. Fredriksson (2001) examines circumstances in which pollution taxes, when combined with pollution-abatement subsidies, may increase pollution and reduce net government revenues, illustrating how competing economic incentives can undermine intended policy outcomes. These findings suggest that fiscal instruments should be assessed collectively rather than independently, particularly where their interaction influences production decisions, environmental performance and public finances. Consequently, fiscal policy's contribution to the SDGs depends on the integration of environmental incentives with equitable revenue allocation, coherent policy design and effective institutional oversight. Its potential lies not simply in modifying economic behaviour but in balancing environmental objectives with the protection of social welfare and economic stability.

4.4 The Relationship Between the Degrowth Economic Model and the Sustainable Development Goals (SDGs)

The relationship between the degrowth economic model and the Sustainable Development Goals (SDGs) is principally associated with its emphasis on reducing environmentally damaging economic activities while prioritising ecological sustainability and social well-being. Schneider et al. (2010) examine degrowth in relation to social equity and ecological sustainability, highlighting the potential for reorganising economic activity to reduce environmental pressures associated with continued expansion in production and consumption. Within this perspective, reductions in resource-intensive activities may contribute to lower greenhouse gas emissions and atmospheric pollution, establishing a conceptual relationship with SDG 13 (Climate Action). However, the environmental effectiveness of degrowth depends not simply on reducing economic output but on transforming patterns of production, consumption and resource allocation. Its potential contribution to SDG 1 (No Poverty) is more complex. Although improvements in environmental quality may reduce exposure to climate-related risks and protect vulnerable livelihoods, reductions in economic activity may also affect employment, public revenues and household incomes if they are not accompanied by appropriate redistributive and social protection measures. Consequently, the compatibility between degrowth and poverty reduction depends on whether ecological objectives are pursued alongside policies supporting equitable resource distribution, access to essential services and economic security. This distinction is particularly important in developing countries, where the reduction of material deprivation may require improvements in infrastructure, employment opportunities and access to resources. Therefore, the relationship between degrowth and SDGs 1 and 13 should be evaluated through both its environmental objectives and the socioeconomic consequences of the transition.

The implications of degrowth for SDG 12 (Responsible Consumption and Production) can be examined through changes in agricultural practices, food systems and broader patterns of resource consumption. Infante-Amate and de Molina (2013) discuss sustainable degrowth in relation to agriculture and food systems, providing a basis for considering how alternative production and consumption arrangements may reduce ecological pressures. Within this context, practices such as organic agriculture, reduced food waste, increased consumption of seasonal products and shifts towards less resource-intensive diets may contribute to lowering the environmental impacts associated with food production and consumption. Nevertheless, these practices are not inherently equivalent to degrowth, as they may also be adopted within economic systems that continue to prioritise aggregate growth. Their relevance to degrowth depends on whether they form part of a broader reduction in resource-intensive production and consumption rather than merely improving the efficiency of existing activities. Furthermore, their environmental benefits vary according to agricultural methods, land-use requirements, supply chains and local conditions. Similar considerations apply to the development of longer-lasting products, reduced material consumption and alternative energy arrangements, which may support environmental objectives but do not necessarily demonstrate reductions in overall ecological pressures. Consequently, degrowth's potential contribution to SDG 12 lies in its broader reconsideration of the scale and purpose of economic activity, alongside efforts to reduce resource extraction, waste generation and environmentally damaging consumption.

The relationship between degrowth and sustainability-oriented economic practices can also be considered through alternative approaches to financial decision-making. Plaza-Úbeda et al. (2020) discuss organisational sustainability within degrowth-related contexts, highlighting the relevance of business practices that incorporate environmental and social objectives alongside financial considerations. Triodos Bank, a financial institution originating in the Netherlands, provides an illustrative example of financing directed towards activities associated with environmental and societal objectives, including organic agriculture, education, energy efficiency and sustainable construction. Such investment priorities may be associated with SDG 7 (Affordable and Clean Energy), SDG 9 (Industry, Innovation and Infrastructure), SDG 11 (Sustainable Cities and Communities) and SDG 12 (Responsible Consumption and Production). However, financing environmentally preferable activities should not be interpreted as direct evidence of adherence to a degrowth economic model. Sustainability-oriented investment may operate within conventional growth-based financial structures and may continue to support economic expansion. Its relationship with degrowth is therefore limited unless financial practices explicitly contribute to reducing material throughput, challenging growth dependence or prioritising social and ecological objectives over aggregate economic expansion. Accordingly, this example illustrates a possible convergence between sustainability-oriented finance and selected degrowth principles, rather than demonstrating the implementation or effectiveness of degrowth itself.

The broader implementation of degrowth also raises questions concerning organisational viability and the relationship between environmental responsibility and economic performance. From an organisational perspective, the implementation of degrowth raises questions about whether businesses can maintain financial stability while reducing resource consumption and prioritising ecological and social objectives. Nevertheless, maintaining organisational stability while reducing resource consumption presents important challenges, particularly where businesses depend on increasing production volumes, expanding markets and continued revenue growth. Although some organisations may improve their environmental performance through changes in production processes and business models, such improvements should not automatically be equated with degrowth if overall material consumption continues to increase. Moreover, the implications of reduced economic activity for employment, public expenditure and access to essential services require careful consideration, particularly in economically vulnerable contexts. The potential contribution of degrowth to the SDGs therefore depends on whether reductions in ecological pressures can be achieved through socially equitable transitions that preserve essential economic functions and support human well-being. These tensions demonstrate that degrowth offers a critical perspective on conventional economic development, but its compatibility with different SDGs remains conditional on institutional arrangements, redistributive policies and the practical consequences of implementation. Table 3 summarises the relationships identified between the four environmental economic strategies examined in this study and the Sustainable Development Goals.

Table 3. Summary of the relationship between environmental economics and the SDGs.

The Sustainable Development Goals (SDGs)		Environmental Economics			
		Environmental–Economics Accounting System	Green Consumerism	Fiscal Policy	De-Growth
1	No Poverty	C		C	C
2	Zero Hunger				
3	Good Health and Well-being	C	C	C	
4	Quality Education				
5	Gender Equality				
6	Clean Water and Sanitation	C			
7	Affordable and Clean Energy				C
8	Decent Work and Economic Growth				
9	Industry, Innovation and Infrastructure				C
10	Reduced Inequalities				
11	Sustainable Cities and Communities				C
12	Responsible Consumption and Production		C	C	C
13	Climate Action		C	C	C
14	Life Below Water	C			
15	Life on Land	C		C	
16	Peace, Justice and Strong Institutions				
17	Partnerships for the Goals				

4.5 Potential Barriers and Consequences Associated with the Implementation of Environmental Economics

Although environmental economic strategies offer potential mechanisms for addressing ecological degradation and supporting the Sustainable Development Goals (SDGs), their implementation is influenced by institutional, financial, regulatory and

socioeconomic conditions. Venkatachalam (2006) examines the relationship between environmental economics and ecological economics, highlighting the importance of recognising environmental limitations within economic decision-making. However, the existence of theoretical frameworks and policy instruments does not necessarily ensure their effective application. Environmental economic approaches may encounter barriers arising from limited institutional capacity, insufficient financial resources, competing economic priorities and differences in regulatory enforcement. Furthermore, interventions intended to improve environmental performance may generate unintended consequences when they interact with existing market structures and socioeconomic inequalities. Consequently, evaluating the contribution of environmental economics to sustainable development requires consideration of both the intended environmental benefits and the conditions that may restrict or undermine their achievement.

The implementation of the System of Environmental-Economic Accounting (SEEA) illustrates the importance of institutional capacity and technical resources. Pirmana et al. (2020) examine barriers associated with the application of environmental-economic accounting in developing countries, particularly in relation to monitoring progress towards the SDGs. Although SEEA provides a recognised framework for documenting environmental assets and their interactions with economic activity, its effective implementation depends on the availability of reliable environmental data, technical expertise and sustained financial support. Obst and Vardon (2014) and Sagoff (2012) address broader challenges associated with recognising and accounting for environmental assets, including the difficulties of incorporating ecological considerations into established economic assessment practices. These challenges may be particularly significant in developing countries, where institutional resources and specialised knowledge are often constrained. The implementation of environmental-economic accounting may also be affected by limitations in technical assistance, financial continuity and the institutional capacity required to compile, maintain and publish environmental accounts. Nevertheless, the broader issue remains that the availability of an internationally recognised accounting framework does not automatically translate into effective implementation. Its contribution to sustainability-related decision-making depends on the ability of national institutions to collect, maintain, interpret and apply environmental information consistently.

Regulatory and organisational constraints represent further barriers to environmentally responsible production and consumption. Businesses may face increasing expectations to reduce pollution, improve resource efficiency and demonstrate compliance with environmental requirements. Jackson et al. (2012) examine organisational approaches to environmental sustainability, highlighting the management responsibilities associated with environmentally oriented practices. In the United States, federal procurement requirements concerning recovered materials and environmentally preferable products illustrate how regulatory mechanisms may influence organisational purchasing and production decisions. However, compliance with such requirements may involve additional administrative responsibilities, technical adjustments and financial expenditure. These challenges can be particularly significant for small and medium-sized enterprises, which may lack the resources or specialised expertise available to larger organisations. Consequently, environmental regulation may generate uneven implementation burdens across businesses, potentially limiting participation or increasing compliance difficulties where appropriate financial, technical and institutional support is unavailable. The effectiveness of regulatory interventions therefore depends not only on the requirements imposed but also on the capacity of organisations to respond and the consistency of enforcement.

A related challenge concerns greenwashing, whereby organisations communicate misleading or insufficiently substantiated claims about their environmental performance. As consumer awareness and demand for environmentally preferable products increase, businesses may encounter incentives to present their activities as sustainable without implementing corresponding improvements in production or resource management. Nyilasy et al. (2014) examine consumer perceptions of greenwashing, highlighting the importance of credibility and scepticism in environmental communication. Delmas and Burbano (2011) investigate the drivers of greenwashing, identifying organisational and regulatory conditions that may encourage misleading environmental representations. Pearson (2010) provides a broader perspective on leadership and organisational responsibility, although its relevance to greenwashing is indirect. Such practices may undermine consumer trust, distort purchasing decisions and weaken incentives for businesses to demonstrate genuine environmental improvements. Furthermore, differences in regulatory oversight and environmental awareness between countries may influence the extent to which misleading claims are identified and challenged. Consequently, the relationship between green consumerism and sustainable development depends not only on environmentally motivated purchasing behaviour but also on transparent corporate communication, credible environmental information and effective regulatory accountability.

Fiscal policy presents additional implementation challenges because environmental taxes, subsidies and public expenditure may produce outcomes that differ from their intended objectives. López et al. (2011) examine the environmental implications of fiscal spending, demonstrating the importance of considering the relationship between government intervention and pollution. Although environmental taxation may encourage businesses to reduce emissions or adopt cleaner technologies, its effectiveness can be influenced by interactions with other policy instruments. Fredriksson (2001) examines circumstances in which pollution taxes may increase pollution and reduce net government revenues when combined with pollution-abatement subsidies. Such outcomes may arise where subsidies reduce production costs and encourage increased economic output, potentially offsetting environmental improvements achieved through cleaner production techniques. If the increase in pollution associated with expanded production exceeds the reductions generated by technological improvements, the overall environmental outcome may be negative. These findings illustrate that environmental fiscal instruments should not be evaluated in isolation. Their effectiveness depends on policy design, the interaction between taxation and subsidies, institutional arrangements and the responses of economic actors. Consequently, achieving environmental objectives requires careful consideration of potential trade-offs between production incentives, public revenues and pollution reduction.

A further potential consequence concerns the relationship between fiscal obligations, informal economic activity and environmental regulation. The shadow economy includes otherwise legal economic activities concealed from public authorities to avoid taxation or regulatory requirements. Schneider (2010) examines the influence of public institutions on the shadow economy, highlighting the importance of institutional conditions in shaping informal economic behaviour. Biswas et al. (2012) investigate the relationships between pollution, the shadow economy and corruption, demonstrating the relevance of regulatory avoidance to environmental outcomes. Businesses operating outside formal regulatory systems may avoid environmental monitoring and compliance obligations, potentially allowing environmentally damaging practices to continue without effective oversight. Nevertheless, increased taxation does not necessarily result in greater informal economic activity under all circumstances. The relationship depends on factors such as institutional credibility, enforcement capacity, administrative complexity and the economic incentives facing businesses. Accordingly, the environmental consequences of fiscal interventions must be considered alongside the capacity of public institutions to maintain regulatory compliance and limit opportunities for avoidance.

Finally, the implementation of degrowth-oriented policies presents challenges concerning political acceptance, economic stability and social equity. Singh (2019) examines the relationship between environmental justice and degrowth, highlighting the importance of addressing inequalities within alternative economic transitions. Although degrowth seeks to reduce environmentally damaging production and consumption, its application may encounter resistance where economic expansion is regarded as essential for employment creation, poverty reduction and improvements in living standards. These concerns are particularly relevant in developing countries, where substantial populations may continue to experience material deprivation and limited access to essential infrastructure and services. Cosme et al. (2017) examine degrowth policy proposals, demonstrating the range of measures considered within this alternative economic perspective. However, the feasibility of such measures depends on whether reductions in resource-intensive activities can be accompanied by equitable redistribution, social protection and continued access to essential goods and services. Vardon et al. (2018) discuss the importance of environmental information for decision-making, reinforcing the wider relevance of institutional capacity to sustainability-oriented policy development. Consequently, the principal challenge for degrowth is not simply reducing economic activity but establishing socially equitable arrangements through which ecological objectives can be pursued without worsening poverty, unemployment or economic insecurity. Taken together, these barriers demonstrate that the contribution of environmental economic strategies to the SDGs is conditional on institutional effectiveness, regulatory accountability, financial capacity and the management of socioeconomic trade-offs.

5. Discussion

The findings indicate that the relationship between environmental economics and the Sustainable Development Goals (SDGs) cannot be understood through the potential contributions of individual strategies alone. Rather, their effectiveness depends on the interaction between environmental objectives, institutional arrangements, economic incentives and socioeconomic conditions. The four approaches examined in this review, natural capital accounting through the System of Environmental-Economic Accounting (SEEA), green consumerism, fiscal policy and degrowth, address different dimensions of sustainable development. SEEA provides information to support environmental decision-making, green consumerism seeks to influence market behaviour, fiscal policy employs public expenditure and economic incentives, and degrowth questions the ecological sustainability of continued economic expansion. Although these approaches may complement one another, they also reflect different assumptions concerning the role of markets, government intervention and economic growth. Their potential contribution to the SDGs should therefore be evaluated in relation to the conditions under which environmental improvements can be achieved without undermining social equity or economic security.

A central implication of the findings is that environmental information and environmentally motivated market behaviour are insufficient when they are not accompanied by effective governance and institutional accountability. SEEA may strengthen the evidence available for identifying resource depletion and ecosystem degradation, but its influence depends on whether policymakers incorporate this information into economic planning and environmental regulation. Similarly, green consumerism may encourage businesses to reconsider production practices, yet environmentally responsible purchasing intentions do not necessarily result in measurable reductions in ecological impacts. The potential for misleading environmental communication further complicates this relationship. Nyilasy et al. (2014) examine consumer responses to greenwashing, while Delmas and Burbano (2011) investigate the organisational and regulatory conditions associated with misleading environmental claims. These studies highlight the importance of transparency and credibility in sustainability-related communication. However, stricter environmental requirements may also generate disproportionate compliance burdens for smaller businesses, potentially affecting competition and the affordability of environmentally preferable products. This creates a tension between strengthening environmental accountability and maintaining equitable participation in sustainable markets. Consequently, the contribution of environmental information and consumer-oriented strategies to the SDGs depends on regulatory arrangements that support credible environmental performance while recognising differences in organisational and consumer capacity.

Institutional effectiveness is equally important in understanding the environmental consequences of fiscal policy. The findings suggest that taxation, subsidies and public expenditure may influence pollution and resource consumption, but their outcomes

depend on policy interactions and the wider governance environment. Fredriksson (2001) examines conditions under which the interaction between pollution taxes and pollution-abatement subsidies may produce unintended environmental consequences. This illustrates the importance of considering the design and interaction of fiscal instruments rather than assuming that their introduction will necessarily improve environmental outcomes. Institutional weaknesses may further undermine policy effectiveness where corruption, regulatory avoidance or informal economic activity restrict the implementation of environmental requirements. Biswas et al. (2012) examine the relationship between pollution, the shadow economy and corruption, while Pellegrini and Gerlagh (2006) provide an empirical perspective on institutional conditions and environmental performance. Huynh and Nguyen (2019) investigate interactions between fiscal policy, the shadow economy and corruption in developing Asian countries, illustrating the importance of considering governance within different economic contexts. Taken together, these studies suggest that the environmental effectiveness of fiscal policy cannot be determined solely by the introduction of taxes or financial incentives. Rather, it depends on transparent decision-making, regulatory enforcement, institutional accountability and the capacity to manage unintended economic responses. This reinforces a broader conclusion of the review: environmental economic strategies require effective institutions to translate policy intentions into measurable environmental outcomes.

The relationship between environmental sustainability and socioeconomic development presents a further challenge, particularly when comparing growth-oriented approaches with degrowth. Green consumerism and environmental fiscal policy may seek to improve ecological performance while operating within economic systems that continue to prioritise growth. Degrowth, by contrast, questions whether continued expansion in aggregate production and consumption can be reconciled with ecological limitations. Ossewaarde and Ossewaarde-Lowtoo (2020) examine the relationship between green growth and degrowth in the context of the European Green Deal, illustrating the different assumptions underlying these approaches. Nevertheless, the applicability of degrowth remains contested, particularly where poverty reduction and improvements in living standards depend on expanded access to resources and essential services. Milanovic (2016) examines global income inequality, highlighting substantial differences in economic circumstances between developed and developing populations. These inequalities suggest that environmental transitions cannot be approached through uniform expectations concerning reductions in production or consumption. Policies that may be feasible in relatively affluent economies may generate different socioeconomic consequences in countries experiencing material deprivation and structural disadvantage. Consequently, the relationship between degrowth and the SDGs requires consideration of distributive justice, social protection and the differentiated responsibilities and development needs of countries. This does not invalidate the ecological concerns raised by degrowth, but indicates that environmental sustainability and socioeconomic equity must be addressed together rather than treated as separate objectives.

Beyond the four principal approaches examined in this review, interdisciplinary perspectives may provide additional insights into the behavioural, ecological and institutional conditions influencing environmental economic strategies. Psychology and sociology can contribute to understanding environmental awareness, consumer preferences and the social conditions influencing economic behaviour, while ecological and biological perspectives highlight the dependence of economic activity on finite natural resources. Blažej and Ambrozy (2013) discuss sustainability from a philosophical perspective, contributing to broader consideration of the relationship between human activity and environmental responsibility. Bioeconomics offers a related perspective by examining interactions between biological processes, economic systems and the utilisation of natural resources. Vargas-Hernández (2019) discusses bioeconomics in relation to sustainable development, highlighting its relevance to resource-based innovation and the relationship between economic activity and ecological conditions. However, bioeconomics should not be interpreted as an additional strategy empirically evaluated within this review, nor should biologically based products or technologies automatically be considered environmentally sustainable. Its relevance lies primarily in demonstrating the importance of assessing economic development in relation to ecological limits, resource availability and long-term environmental consequences. An interdisciplinary perspective may therefore help explain why environmental interventions produce different outcomes across institutional, economic and social contexts.

Overall, the synthesis indicates that the four environmental economic strategies provide potentially complementary, but not interchangeable, pathways towards sustainable development. Building upon earlier scholarship, the present review places particular emphasis on comparing the mechanisms through which these approaches operate and critically examining the institutional, economic and socioeconomic conditions influencing their potential effectiveness. Although these approaches may support interconnected Sustainable Development Goals (SDGs), their conceptual alignment with sustainability objectives should not be interpreted as evidence of demonstrated environmental or socioeconomic improvements. A central contribution of the present synthesis is therefore its examination of the tensions between anticipated sustainability benefits, implementation conditions and potential unintended consequences, particularly where institutional limitations and socioeconomic inequalities influence policy outcomes. Rather than identifying a universally preferable strategy, the analysis highlights the importance of context-sensitive combinations of environmental information, economic instruments, regulatory accountability and social protection. This perspective reinforces the need to evaluate environmental economic strategies according to their practical implementation and measurable consequences, especially within developing-country contexts.

6. Conclusions, Implications, and Limitations

6.1 Conclusions

This literature review examined the relationships between environmental economics and the Sustainable Development Goals (SDGs), focusing on four approaches: the System of Environmental-Economic Accounting (SEEA), green consumerism, fiscal policy and the degrowth economic model. The synthesis identified potential contributions to interconnected sustainability objectives, particularly environmental protection, responsible consumption and production, resource management, human well-being and socioeconomic development. However, the findings demonstrate that these approaches operate through distinct mechanisms and are subject to different institutional, economic and social conditions. Their potential contributions should therefore be interpreted in relation to the contexts in which they are implemented, rather than as evidence of automatic or universally measurable progress towards the SDGs.

A central conclusion is that the effectiveness of environmental economic strategies depends on the institutional, financial and socioeconomic conditions under which they are implemented. The review identified challenges relating to environmental data availability, technical expertise, regulatory compliance, greenwashing, the interaction between taxation and subsidies, informal economic activity and the socioeconomic implications of degrowth. These barriers demonstrate that environmental objectives cannot be considered independently of governance arrangements, organisational capacity and social equity. In particular, strategies that may support environmental improvements in one economic context may generate different consequences in another, especially where financial limitations, institutional weaknesses or material deprivation constrain implementation. Consequently, sustainable development requires coordinated approaches that combine credible environmental information, appropriately designed economic instruments, transparent organisational practices and measures that protect vulnerable populations. The findings also indicate the value of interdisciplinary perspectives, particularly those concerned with human behaviour, social relationships and ecological processes, in understanding the wider consequences of environmental economic decision-making. Rather than identifying a single preferable strategy, the review emphasises the importance of context-sensitive combinations of measures that address ecological limitations alongside economic security and human well-being.

6.2 Implications

The findings have implications for environmental policymaking, organisational sustainability and future academic research. For governments and policymakers, the review highlights the importance of integrating environmental information into economic planning and evaluating the wider consequences of fiscal and regulatory interventions. Environmental-economic accounts may provide evidence relevant to resource management and environmental protection, while taxation, subsidies and public expenditure may influence production and consumption practices. However, these mechanisms require effective institutional coordination, transparent decision-making and appropriate monitoring to ensure that intended environmental objectives are not undermined by unintended economic responses. In developing countries, particular attention should be given to technical capacity, financial resources and the potential distributional consequences of environmental policies. Measures intended to improve ecological conditions should therefore be considered alongside poverty reduction, access to essential services and wider development priorities.

For businesses and other economic actors, the review emphasises the importance of translating environmental commitments into demonstrable organisational practices. Consumer demand for environmentally preferable products may encourage improvements in resource management and production methods, but sustainability-related claims require credible supporting information. Greater transparency and accountability may help distinguish substantive environmental improvements from promotional representations, while proportionate regulatory requirements and appropriate support mechanisms may assist smaller organisations in responding to environmental expectations. At the same time, the findings suggest that environmentally responsible business practices should be assessed according to their actual ecological and social consequences rather than assumed to be sustainable because of their stated objectives.

From an academic perspective, the review provides a conceptual synthesis of four environmental economic approaches and their potential relationships with the SDGs. Its contribution lies in identifying both possible complementarities and tensions between information-based, market-oriented, fiscal and growth-critical strategies. The analysis also highlights the importance of interdisciplinary research that incorporates institutional governance, socioeconomic inequality, environmental behaviour and ecological limitations. Nevertheless, the findings should be interpreted as a literature-based assessment of potential relationships and implementation conditions, rather than as direct evidence of the effectiveness of particular policies or interventions. Further empirical research is needed to establish how these relationships operate within specific national, regional and organisational contexts.

6.3 Limitations

Several limitations should be acknowledged when interpreting the findings of this review. First, the literature considered was restricted to English-language publications, potentially excluding relevant research published in other languages and limiting the geographical and conceptual diversity of the evidence examined. The literature search conducted by the authors used Web of Science (WoS) and Scopus as the principal databases, meaning that relevant publications indexed exclusively elsewhere may not have been captured. These restrictions may have influenced the range of perspectives represented in the reviewed literature, particularly concerning environmental economic practices in developing countries.

Second, the review employed a qualitative approach involving interpretative decisions during the selection, categorisation and synthesis of published literature. Although this approach enabled the examination of relationships between environmental economic strategies and sustainable development objectives, the findings remain influenced by the scope and characteristics of the available studies. Differences in research design, geographical context, analytical methods and reported outcomes also limit the extent to which conclusions can be generalised across economic and institutional settings. Furthermore, the review did not undertake a formal quantitative meta-analysis or directly measure the environmental and socioeconomic effects of the strategies examined. Consequently, the relationships identified should be interpreted as conceptual and literature-supported associations rather than definitive causal evidence.

Third, the analysis considered the Sustainable Development Goals primarily at the level of their broader objectives rather than through a systematic examination of all individual targets and indicators. Although this approach enabled the identification of connections between environmental economics and multiple sustainability priorities, it limits the precision with which particular strategies can be associated with measurable SDG outcomes. Future research could address this limitation by examining specific SDG targets and indicators, assessing policy effectiveness through comparable empirical measures and investigating potential synergies and trade-offs between different sustainability objectives.

Fourth, although the literature identification and screening process was conducted by the authors, the methodological transparency and reproducibility of the review depend on the completeness of the documented search strategy, including database-specific search expressions, search dates, eligibility criteria and screening decisions. Although duplicate records were assessed during the initial selection process, the number removed was not documented separately, limiting the precision with which this stage of the literature screening process can be reconstructed. Of the 81 publications retained following full-text assessment, 59 were prioritised for detailed thematic classification based on their relevance and analytical contribution to the research questions. This selective approach enabled a focused comparison of the principal environmental economic strategies but may have limited the representation of alternative perspectives contained within the remaining 22 publications. Furthermore, the thematic classification was descriptive and did not involve a formal methodological quality appraisal or quantitative weighting of evidence. Consequently, the findings should be interpreted as a critical qualitative synthesis rather than an exhaustive or statistically representative assessment of the available literature. Future research could strengthen methodological reproducibility through comprehensive reporting of database searches, detailed exclusion records and systematic documentation of thematic classifications.

Finally, the review focused on four selected environmental economic strategies and did not comprehensively examine all approaches relevant to sustainable development. Its scope therefore limits the extent to which the findings can represent the broader field of environmental economics. Future investigations could extend the analysis through comparative studies across developed and developing countries, interdisciplinary research involving psychology, sociology and ecological sciences, and empirical evaluations of the institutional and behavioural conditions influencing policy implementation. Such research may contribute to a more detailed understanding of how environmental economic strategies can support sustainable development while addressing socioeconomic inequalities and ecological constraints.

Author Contributions & Declarations

Author Contributions: Conceptualisation, S.S.D.; methodology, S.S.D.; investigation, S.S.D.; formal analysis, S.S.D.; resources, S.S.D.; data curation, S.S.D.; visualisation, S.S.D.; writing—original draft preparation, S.S.D.; writing—review and editing, S.S.D. and G.N.; validation, G.N.; project administration, S.S.D. Both authors have read and approved the final version of the manuscript and agree to be accountable for their respective contributions.

Funding: This research received no external funding.

Ethics Approval and Institutional Review Board Statement: This study involved a critical review and analysis of previously published academic literature, institutional reports and publicly available secondary sources. No primary data were collected from human participants or animals. Consequently, formal ethical approval was not required for the research, subject to applicable institutional and publisher requirements.

Consent to Participate: Not applicable. The study did not involve the recruitment of human participants or the collection of primary personal data.

Consent for Publication: Not applicable to research participants, as the study does not include identifiable participant information. Both authors have reviewed and approved the final manuscript and consent to its submission for publication.

Availability of Data and Materials: No new primary empirical datasets were generated or collected during this study. The research is based on previously published academic literature and publicly available secondary sources, which are identified in the reference list. The findings and interpretations are presented within the manuscript.

Declaration of Generative AI and AI-Assisted Technologies: During the preparation of this manuscript, the authors used ChatGPT (OpenAI) to assist with language refinement, paraphrasing, grammatical corrections, structural organisation and improvements in academic clarity. The authors reviewed and critically evaluated the AI-assisted content and retained full responsibility for the accuracy, originality, interpretation, references and conclusions presented in the manuscript. Generative AI was not used as an independent source of scientific evidence or as a substitute for the authors' scholarly judgement.

Competing Interests: The authors declare no competing financial or non-financial interests associated with this research.

Acknowledgements: The authors acknowledge the academic environment and institutional support provided by Alexander College, Cyprus, and Canterbury Christ Church University (CCCU), United Kingdom, in supporting academic research and scholarly development.

Declaration of Originality: The authors confirm that this manuscript represents their original scholarly work, has not been published previously and is not currently under consideration for publication elsewhere. All sources used in the preparation of the manuscript have been appropriately acknowledged and cited.

Code Availability: Not applicable. No custom software code was developed or used as part of this research.

Clinical Trial Registration: Not applicable. This study did not involve a clinical trial.

References

Alcott, B. (2013). Should degrowth embrace the Job Guarantee? Journal of Cleaner Production, 38, 56–60.

Allen, M.W., & Craig, C.A. (2016). Rethinking corporate social responsibility in the age of climate change: A communication perspective. International Journal of Corporate Social Responsibility, 1, 1. https://doi.org/10.1186/s40991-016-0002-8

Ambec, S., & De Donder, P. (2022). Environmental policy with green consumerism. Journal of Environmental Economics and Management, 111, 102584.

Antweiler, W., Copeland, B.R., & Taylor, M.S. (2001). Is Free Trade Good for the Environment? American Economic Review, 91, 877–908. https://doi.org/10.1257/aer.91.4.877

Battaglini, M., & Coate, S. (2015). A Political economy theory of fiscal policy and unemployment. Journal of the European Economic Association, 14, 303–337.

Beder, S. (1996). Charging the earth: The promotion of price-based measures for pollution control. Ecological Economics, 16, 51–63.

Beder, S. (2011). Environmental economics and ecological economics: The contribution of interdisciplinarity to understanding, influence and effectiveness. Environmental Conservation, 38, 140–150.

Bennich, T., Weitz, N., & Carlsen, H. (2020). Deciphering the scientific literature on SDG interactions: A review and reading guide. Science of the Total Environment, 728, 138405. https://doi.org/10.1016/j.scitotenv.2020.138405

Biswas, A.K., Farzanegan, M.R., & Thum, M. (2012). Pollution, shadow economy and corruption: Theory and evidence. Ecological Economics, 75, 114–125.

Blažej, A., & Ambrozy, M. (2013). Some aspects of the problems of keeping sustainable development in the philosophy of Martin Heidegger. International Journal of Multidisciplinary Thought, 3, 385–391.

Corbett, L.M. (2009). Sustainable operations management: A typological approach. Journal of Industrial Engineering and Management, 2, 10–30.

Cordova, M. F., & Celone, A. (2019). SDGs and innovation in the business context literature review. Sustainability, 11(24), 7043. https://doi.org/10.3390/su11247043

Cosme, I., Santos, R., & O'Neill, D. (2017). Assessing the degrowth discourse: A review and analysis of academic degrowth policy proposals. Journal of Cleaner Production, 149, 321–334. https://doi.org/10.1016/j.jclepro.2017.02.016

Dagher, G.K., & Itani, O. (2014). Factors influencing green purchasing behaviour: Empirical evidence from the Lebanese consumers. Journal of Consumer Behaviour, 13, 188–195.

Delmas, M.A., & Burbano, V.C. (2011). The Drivers of Greenwashing. California Management Review, 54, 64–87. https://doi.org/10.1525/cmr.2011.54.1.64

Elsantil, Y. (2021). Antecedents of Green Purchasing Behavior in the Arabic Gulf. Social Marketing Quarterly, 27, 133–149.

Felber, C. (2015). Change Everything–The Economy for the Common Good, 1st ed.; Zed Books, Ltd.: London, UK.

Field, B.C., & Field, M.K. (2017). Environmental Economics-An Introduction, 7th ed.; McGraw-Hill Education: New York, NY, USA.

Fredriksson, P.G. (2001). How Pollution Taxes may Increase Pollution and Reduce Net Revenues. Public Choice, 107, 65–85.

Gerlagh, R., Bijgaart, I.V.D., Nijland, H., & Michielsen, T. (2016). Fiscal Policy and CO2 Emissions of New Passenger Cars in the EU. Environmental and Resource Economics, 69, 103–134.

Gomez-Mejia, L.R., Balkin, D.B., & Cardy, R.L. (2012). Managing Human Resources; Prentice Hall: Hoboken, NJ, USA.

Han, H., Hsu, L.-T.J., & Lee, J.-S. (2009). Empirical investigation of the roles of attitudes toward green behaviors, overall image, gender, and age in hotel customers' eco-friendly decision-making process. International Journal of Hospitality Management, 28, 519–528.

Haytko, D.L., & Matulich, E. (2008). Green advertising and environmentally responsible consumer behaviors: Linkages examined. Journal of Management and Marketing Research, 1, 2–11.

Hutton, C. W., Nicholls, R. J., Lázár, A. N., Chapman, A., Schaafsma, M., & Salehin, M. (2018). Potential trade-offs between the Sustainable Development Goals in coastal Bangladesh. Sustainability, 10(4), 1108. https://doi.org/10.3390/su10041108

Huynh, C.M. (2020). Shadow economy and air pollution in developing Asia: What is the role of fiscal policy? Environmental Economics and Policy Studies, 22, 357–381.

Huynh, C.M., & Nguyen, T.L. (2019). Fiscal policy and shadow economy in Asian developing countries: Does corruption matter? Empirical Economics, 59, 1745–1761.

Infante-Amate, J., & González de Molina, M. (2013). "Sustainable de-growth" in agriculture and food: An agro-ecological perspective on Spain's agri-food system (year 2000). Journal of Cleaner Production, 38, 27–35.

Jackson, S.E., Ones, D.S., & Dilchert, S. (2012). Managing Human Resource for Environmental Sustainability; John Wiley & Sons: Hoboken, NJ, USA.

Jakob, M., & Edenhofer, O. (2014). Green growth, degrowth, and the commons. Oxford Review of Economic Policy, 30, 447–468. https://doi.org/10.1093/oxrep/gru026

Kahneman, D., & Knetsch, J.L. (1992). Valuing public goods: The purchase of moral satisfaction. Journal of Environmental Economics and Management, 22, 57–70. https://doi.org/10.1016/0095-0696(92)90019-S

Laroche, M., Bergeron, J., & Barbaro-Forleo, G. (2001). Targeting consumers who are willing to pay more for environmentally friendly products. Journal of Consumer Marketing, 18, 503–520. https://doi.org/10.1108/EUM0000000006155

Latouche, S. (2009). Farewell To Growth, 1st ed.; Polity Press: Cambridge, UK.

Lorek, S., & Fuchs, D. (2013). Strong sustainable consumption governance—Precondition for a degrowth path? Journal of Cleaner Production, 38, 36–43.

Lélé, S.M. (1991). Sustainable development: A critical review. World Development, 19, 607–621.

López, R., Galinato, G.I., & Islam, A. (2011). Fiscal spending and the environment: Theory and empirics. Journal of Environmental Economics and Management, 62, 180–198.

Mani, M., & Wheeler, D. (1998). In search of pollution havens? Dirty industry in the world economy, 1960 to 1995. The Journal of Environment & Development, 7, 215–247.

Medina, L., & Schneider, F. (2018). Shadow economies around the world: What did we learn over the last 20 years? IMF Working Paper No. 18/17. International Monetary Fund. https://doi.org/10.5089/9781484338636.001

Milanovic, B. (2016). Global Inequality: A New Approach for the Age of Globalization, 1st ed.; Belknap Press: London, UK.

Mio, C., Panfilo, S., & Blundo, B. (2020). Sustainable development goals and the strategic role of business: A systematic literature review. Business Strategy and the Environment, 29, 3220–3245.

Mostafa, M.M. (2007). Gender differences in Egyptian consumers? green purchase behaviour: The effects of environmental knowledge, concern and attitude. International Journal of Consumer Studies, 31, 220–229.

Muff, K., Kapalka, A., & Dyllick, T. (2017). The Gap Frame-Translating the SDGs into relevant national grand challenges for strategic business opportunities. The International Journal of Management Education, 15, 363–383.

Musgrave, R.A. and Musgrave, P.B. (1989) *Public finance in theory and practice*. 5th edn. New York: McGraw-Hill.

Nadeau, R.L. (2015). The unfinished journey of ecological economics. Ecological Economics, 109, 101–108.

Nerini, F.F., Sovacool, B., Hughes, N., Cozzi, L., Cosgrave, E., Howells, M., Tavoni, M., Tomei, J., Zerriffi, H., & Milligan, B. (2019). Connecting climate action with other Sustainable Development Goals. Nature Sustainability, 2, 674–680.

Nyilasy, G., Gangadharbatla, H., & Paladino, A. (2014). Perceived Greenwashing: The Interactive Effects of Green Advertising and Corporate Environmental Performance on Consumer Reactions. J. Bus. Ethics, 125, 693–707.

Obst, C., & Vardon, M. (2014). Recording environmental assets in the national accounts. Oxford Review of Economic Policy, 30, 126–144. https://doi.org/10.1093/oxrep/gru003

Ossewaarde, M., & Ossewaarde-Lowtoo, R. (2020). The EU's Green Deal: A third alternative to green growth and degrowth? Sustainability, 12(23), 9825. https://doi.org/10.3390/su12239825

Paetz, A.-G., Dütschke, E., & Fichtner, W. (2012). Smart Homes as a Means to Sustainable Energy Consumption: A Study of Consumer Perceptions. Journal of Consumer Policy, 35, 23–41.

Paul, J., Modi, A., & Patel, J. (2016). Predicting green product consumption using theory of planned behavior and reasoned action. Journal of Retailing and Consumer Services, 29, 123–134.

Pearce, D. (2002). An Intellectual History of Environmental Economics. Annual Review of Energy and the Environment, 27, 57–81.

Pearson, J. (2010). Turning point: Are we doing the right thing? Leadership and prioritisation for public benefit. Journal of Corporate Citizenship, 2010(37), 37–40. https://doi.org/10.9774/GLEAF.4700.2010.sp.00006

Pedersen, C.S. (2018). The UN Sustainable Development Goals (SDGs) are a Great Gift to Business! Procedia CIRP, 69, 21–24.

Pellegrini, L., & Gerlagh, R. (2006). Corruption, democracy, and environmental policy: An empirical contribution to the debate. The Journal of Environment & Development, 15(3), 332–354. https://doi.org/10.1177/1070496506290960

Pirmana, V., Alisjahbana, A. S., Yusuf, A. A., Hoekstra, R., & Tukker, A. (2020). Environmental costs assessment for improved environmental-economic account for Indonesia. Journal of Cleaner Production, 280, 124521.

Plaza-Úbeda, J. A., Burgos-Jiménez, J., Vazquez-Brust, D., & Liston-Heyes, C. (2009). The "win–win" paradigm and stakeholder integration. Business Strategy and the Environment, 18(8), 487–499. https://doi.org/10.1002/bse.593

Plaza-Úbeda, J.A., Pérez-Valls, M., Cespedes-Lorente, J., & Payán-Sánchez, B. (2020). The contribution of systems theory to sustainability in degrowth contexts: The role of subsystems. Systems Research and Behavioral Science, 37, 68–81.

Sachs, J.D. (2012). From Millennium Development Goals to Sustainable Development Goals. Lancet, 379, 2206–2211.

Sagoff, M. (2012). Environmental Economics. Encyclopedia of Applied Ethics, 97–104.

Schneider, F. (2010). The Influence of Public Institutions on the Shadow Economy: An Empirical Investigation for OECD Countries. Review of Law & Economics, 6, 441–468.

Schneider, F., Kallis, G., & Martinez-Alier, J. (2010). Crisis or opportunity? Economic degrowth for social equity and ecological sustainability. Introduction to this special issue. Journal of Cleaner Production, 18, 511–518.

Singh, N.M. (2019). Environmental justice, degrowth and post-capitalist futures. Ecological Economics, 163, 138–142.

Sorman, A.H., & Giampietro, M. (2013). The energetic metabolism of societies and the degrowth paradigm: Analyzing biophysical constraints and realities. Journal of Cleaner Production, 38, 80–93.

Stern, P.C. (2000). Toward a coherent theory of environmentally significant behavior. Journal of Social Issues, 56, 407–424.

Tseng, C.-H. (2016). The effect of price discounts on green consumerism behavioral intentions. Journal of Consumer Behaviour, 15, 325–334.

Ulph, A., & Ulph, D. (2021). Environmental policy when consumers value conformity. Journal of Environmental Economics and Management, 109, 102172.

United Nations, European Commission, International Monetary Fund, Organisation for Economic Co-operation and Development, & World Bank. (2003). Integrated environmental and economic accounting 2003. https://unstats.un.org/unsd/envaccounting/seea2003.pdf

United Nations, European Commission, International Monetary Fund, Organisation for Economic Co-operation and Development, & World Bank. (2009). System of National Accounts 2008. https://unstats.un.org/unsd/nationalaccount/sna2008.asp

United Nations. (2015). The 17 goals. https://sdgs.un.org/goals

United Nations. (2018). Global indicator framework for the Sustainable Development Goals and targets of the 2030 Agenda for Sustainable Development. https://unstats.un.org/sdgs/indicators/indicators-list/

United Nations. (2021). System of Environmental-Economic Accounting—Ecosystem Accounting. https://seea.un.org/ecosystem-accounting

Vardon, M., Castaneda, J.-P., Nagy, M., & Schenau, S. (2018). How the System of Environmental-Economic Accounting can improve environmental information systems and data quality for decision making. Environ. Sci. Policy, 89, 83–92.

Vargas-Hernández, J. G. (2019). Bio-economy at the crossroads of sustainable development. In Advanced integrated approaches to environmental economics and policy: Emerging research and opportunities (pp. 23–48). IGI Global.

Vazquez-Brust, D., & Plaza-Úbeda, J. (2021). Green growth policy, de-growth, and sustainability: The alternative solution for achieving the balance between both the natural and the economic system. Sustainability, 13(9), 4610. https://doi.org/10.3390/su13094610

Venkatachalam, L. (2006). Environmental economics and ecological economics: Where they can converge? Ecological Economics, 61, 550–558.

Walz, R., Pfaff, M., Marscheider-Weidemann, F., & Glöser-Chahoud, S. (2017). Innovations for reaching the green sustainable development goals–Where will they come from? International Economics and Economic Policy, 14, 449–480.

Wang, J., Nguyen, N., & Bu, X. (2020). Exploring the roles of green food consumption and social trust in the relationship between perceived consumer effectiveness and psychological wellbeing. International Journal of Environmental Research and Public Health, 17(13), 4676. https://doi.org/10.3390/ijerph17134676

Wiedenhofer, D., Guan, D., Liu, Z., Meng, J., Zhang, N., & Wei, Y.-M. (2017). Unequal household carbon footprints in China. Nature Climate Change, 7, 75–80.

Xue, S., Zhang, B., & Zhao, X. (2021). Brain drain: The impact of air pollution on firm performance. Journal of Environmental Economics and Management, 110, 102546.

Zhang, Q., Prouty, C., Zimmerman, J.B., & Mihelcic, J.R. (2016). More than Target 6.3: A Systems Approach to Rethinking Sustainable Development Goals in a Resource-Scarce World. Engineering, 2, 481–489.