

# GREEN WEALTH

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FINANCIAL ANALYSIS VOLUME 117

# GREEN WEALTH: NAVIGATING TOWARDS A SUSTAINABLE FUTURE

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# INTRODUCTION

Grațiela-Georgiana Noja

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In contemporary times, humanity is faced with environmental challenges of an unprecedented magnitude. These challenges require a thoughtful and proactive approach to identify meaningful and sustainable solutions. Consequently, sustainable economic development has emerged as a potential solution to balance economic growth with environmental preservation. This has prompted scholars, policymakers, and activists to explore innovative approaches prioritising the welfare of both people and the planet.

In this context, the book *Green Wealth: Navigating Towards a Sustainable Future* innovatively addresses the topical subject of sustainable development and green innovation. It aims to contribute to this emerging field by helping readers interested in interdisciplinary methods, tailored strategies, and policies to manage environmental risks and enhance economic welfare. Moreover, the book ambitiously addresses environmental challenges and provides accurate research for a resilient, eco-friendly future through a comprehensive and integrated approach. Through its 16 chapters, the book undertakes a multidisciplinary approach that embeds principles of economics, ecology, sociology, mathematics, and political science, providing a comprehensive understanding of this emerging field of study.

At the core of this exploration lies the concept of green wealth, which surpasses traditional notions of prosperity by incorporating ecological integrity and social well-being into the fabric of economic progress. Pressing issues like climate change, biodiversity loss, and resource shrinkage have brought to the fore the critical need to ensure sustainable development.

*Green Wealth: Navigating Towards a Sustainable Future* serves as a manifesto for this transformative journey towards a more resilient and inclusive future. It embeds theoretical underpinning, advanced econometric studies, and mathematical models that shed light on the numerous ways in which sustainable economic development can be achieved. More specifically, the book starts with a detailed

description of the role of sustainable finance for a blue economy and the role of local governance in coping with environmental challenges, including those induced by the shadow economy, and ensuring a sustainable future. It further presents the inferences between technological and financial innovations and sustainable development and outlines the importance of attracting environment-friendly and socially responsible investors. The following section provides a dynamic analysis of sustainable economic stake and coproduction in competition and explores the elusive sustainability in the fashion industry and tourism sectors. Finally, the book captures the social and economic factors of bioeconomy development at the level of the European Union and assesses the effectiveness of policy pathways to sustainability, while also addressing the role of artificial neural networks and machine-learning techniques for comparative CSR and ESG actions.

On these lines, the book fundamentally explores the innovative initiatives governments, businesses, and communities undertake to drive positive change in societies worldwide. From renewable energy projects that mitigate carbon emissions to inclusive economic policies that empower marginalised populations, each chapter offers insights into practical strategies for establishing a greener and more prosperous world.

To mitigate the environmental impacts of energy production and consumption, researchers are exploring efficient and economically viable technical solutions. Environmental protection can be enhanced by intensifying the environmental innovation process, which can be facilitated by research and development support from governing authorities. Furthermore, energy innovation is crucial in reducing energy intensity and environmental pollution. Technological innovations help reduce carbon emissions, making them essential for achieving environmental sustainability.

In this complex frame of facts and challenges, the current book transcends the realm of theory, providing readers with actionable steps to catalyse sustainable development in their respective spheres of influence. Whether one is a researcher interested in this theme, a policymaker crafting environmental regulations, a business leader seeking to integrate sustainability into corporate strategy, or an individual committed to making a difference in their community, *Green Wealth: Navigating Towards a Sustainable Future* equips them with the knowledge and inspiration to effect meaningful change.

*Green Wealth: Navigating Towards a Sustainable Future* is a book that urges a fresh perspective on sustainable economic development. It advocates for an approach that equally regards the welfare of our ecosystems and economic development.

The book demonstrates cutting-edge solutions that have been developed to combat some of the most significant environmental challenges of our time, including, but not limited to, environmental challenges/climate change, bioeconomy development, technological innovations, sustainable finance, and the blue economy. The strategies discussed in the book are drawn from global initiatives and best practices and can be applied in diverse contexts.

The book's focus on innovative solutions underscores the need for transformative actions to catalyse progress towards achieving sustainable development goals. The book highlights that sustainability is an issue that goes beyond the environmental domain and extends into the social and economic spheres. It also examines sustainability's social and ethical dimensions, such as greenwashing in global supply chains.

In conclusion, *Green Wealth: Navigating Towards a Sustainable Future* proffers an inspiring guidebook on the roadmap towards a sustainable world. The originality of the book resides in the topical subject it approaches, as well as in the innovative way in which it is designed and structured to provide a basic overview and a nuanced understanding of sustainable development and green wealth. The interdisciplinary approach adopted in this book bridges gaps between various fields, fostering a holistic perspective essential for effective problem-solving and offering a multifaceted framework capable of navigating the intricacies of sustainable development.

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# CHAPTER 1

## SUSTAINABLE FINANCE FOR A BLUE ECONOMY

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### ABSTRACT

*Purpose: The concept of a blue economy is gaining importance. 40% of the world's population lives near coastal areas, and 80% of world trade is achieved using the seas. Sustainable financing for the blue economy is an emerging scope in climate finance. To date, little research has been published on this topic. Shiiba et al. (2022) proposed a conceptual framework for a blue finance mechanism; however, this approach was incomplete as it referred only to ocean sustainability and overlooked financial instruments and various financial models and schemes determined by a financial system, such as those in the United States, Germany, and Japan.*

*Methodology: The chapter aims to show the state of the art in sustainable financing in a blue economy and provide recommendations to improve the existing financial model.*

*A critical literature review, network approach, and case study.*

*Findings: The diversity and often uniqueness of blue economy projects underline the necessity for their financing system to be based on established regulatory frameworks in this area. However, specific solutions (e.g. the structure of acquired capital) should be considered on a case-by-case basis.*

*Limitations: Challenges include competition with government-owned sectors, infrastructure limitations, and limited public awareness of sustainable blue economy opportunities. Additionally, constraints like risk-averse local financial institutions and a lack of innovative business models hinder financing and entrepreneurship.*

**Keywords:** Climate change; sustainability; global finance; strategy; responsible finance

**JEL Codes:** Q01; G10; Q56; Q25

## 1. INTRODUCTION

The dissemination of the concept of sustainable development, along with the growing awareness of the impact of current generations' actions on the availability of resources for future generations, has led, among other things, to the emergence of the concept of the blue economy. Protecting and maintaining the biodiversity of seas and oceans, as well as building a resilient and environmentally sustainable maritime economy, are the main goals of the blue economy (Knodt et al., 2023), which can serve as a framework integrating policies for sustainable development and the sustainable development of seas and oceans.

The blue economy, due to the context of climate change and its impact on aquatic ecosystems, remains an important area of research interest, but it is also a challenge from the perspective of the progressive degradation of water and water resources. The negative impact of human activity on the blue economy is observable both in the context of its pollution and excessive and destructive exploitation of resources, for example illegal fishing, the destruction of coral reefs and coastlines, and eutrophication as a result of global warming. The indicated examples of the negative impact of man on the blue economy threaten its stability, and at this point, it is worth recalling the economic, environmental, and social functions of the blue economy, pointing to its importance, inter alia, for quality of life, well-being, and sustainable development. One of the factors of the progressive degradation and destruction of the blue economy is its unsustainable financing, that is financing activities based on one decision criterion, namely, the profit criterion, not taking into account the negative social and environmental consequences. Redirecting funding streams to projects supporting the development of the blue economy requires redefining the decision-making criteria and building a sustainable financial mechanism for the blue economy with the participation of all stakeholders.

The importance of oceans is well-documented in scientific research. They are home to over 80% of all life on Earth, are a crucial source of food and economic security for millions of people, play a significant role in climate regulation processes, and are the world's largest carbon dioxide sink (Chen & Huang, 2023). Sustainable blue economy faces various challenges, including global warming, ocean acidification, and still limited knowledge about the oceans, as about 95% of their waters remain unexplored. Understanding the blue economy, implementing

it on a global scale, and effectively managing it are crucial in ensuring the sustainable development of seas and oceans (Howard et al., 2017).

Some actions have already been taken, including noting the need for intervention, including the protection of the blue economy, SDGs14 Life below water was included among the SDGs, but it is not the only objective having an impact on restoring stability and balance to the blue economy. SDGs and their implementation will require not only public financing but above all the inclusion of private capital, and here, there are questions on how to build a financial mechanism for the blue economy with the participation of stakeholders and types of capital and financial instruments.

The financial system plays a key role in the process of achieving the Sustainable Development Goals. With increasing demand for ocean resources and increasing pollution and acidification, sustainable blue finance aims to protect and ensure the sustainability of oceans and water resources while supporting economic growth and development. The Paulson Institute has estimated that biodiversity financing faces an average annual shortfall of approximately \$711 billion (Sumaila et al., 2022). With the emergence of the so-called blue economy various financing mechanisms and financial structures are proposed to simultaneously protect marine biodiversity and generate profits (Christiansen, 2021). Sustainable blue financing mechanisms should be coordinated with conventional financing sources to effectively implement the designated tasks. The aim of the chapter is to present the current state of knowledge in the field of sustainable financing in the blue economy and to present recommendations for improvements to the existing financial model.

In particular, the following research questions were asked:

1. What is the current state of research on sustainable finance for a blue economy?
2. What keywords do the authors use to describe sustainable finance for a blue economy?
3. What actions are taken in the European Union and at the level of individual countries in terms of financing the blue economy?

The chapter is organised as follows: Section 2 presents a critical literature review; Section 3 presents mechanisms of financing the blue economy; Section 4 case study and Section 5 outlines our conclusion and recommendations.

## **2. LITERATURE REVIEW OF SUSTAINABLE FINANCE FOR A BLUE ECONOMY STATE OF THE ART**

While the concept of the blue economy emerged in 2010, there is still no universal definition. According to the European Commission, the blue economy encompasses ‘activities related to the ocean, seas, and coasts and covers a wide range of interlinked established and emerging sectors, including coastal tourism, aquaculture, ocean energy, marine biotechnology, shipbuilding, maritime transport, and fisheries’ (European Commission, 2024a). The World Bank (2024) describes

it as the ‘sustainable use of ocean resources for economic growth, improved livelihoods, and jobs while preserving the health of ocean ecosystems’. A United Nations representative recently defined the blue economy as an economy that

comprises a range of economic sectors and related policies that together determine whether the use of ocean resources is sustainable. An important challenge of the blue economy is to understand and better manage the many aspects of oceanic sustainability, ranging from sustainable fisheries to ecosystem health to preventing pollution. Secondly, the blue economy challenges us to realize that the sustainable management of ocean resources will require collaboration across borders and sectors through a variety of partnerships, and on a scale that has not been previously achieved. This is a tall order, particularly for Small Island Developing States (SIDS) and Least Developed Countries (LDCs) who face significant limitations.

The UN notes that the blue economy will aid in achieving the UN Sustainable Development Goals, of which one goal, 14, is ‘Life Below Water’ (The United Nations, 2024). Meanwhile, the World Wild Fund describes the blue economy in two senses: ‘For some blue economy means the use of the sea and its resources for sustainable economic development. For others, it simply refers to any economic activity in the maritime sector whether sustainable or not’ ([Principles for a Sustainable Blue Economy, 2024](#)).

The Web of Science (WoS) database was used to search for publications in the area of sustainable finance for the blue economy. A total number of 128 publications from years 2013 to 2024 were found which contained the search terms in the title, keywords, or abstract – 106 publications referring to ‘sustainable blue economy’ and 22 publications referring to ‘blue economy financ\*’.

The sample summary shows that the majority of publications are journal articles, with the number of publications increasing significantly since 2019, except for a small decline in 2020 ([Table 1.1](#); [Fig. 1.1](#)).

**Table 1.1.** Description of the Sample.

Sample size		128
	<i>Publication type</i>	
Journal		117
Book		2
Conference paper		9
	<i>Publication year</i>	
2024 (Q1)		11
2023		47
2022		30
2021		14
2020		7
2019		10
2018		3
2017		2
2016		2
2015		0
2014		1
2013		1

*Source:* Own compilation based on WoS database.