Chapter 6 Green Finance for Sustaining Tomorrow: Empowering Environmental Measures

Devender K

SR University, Hanamkonda, India

Kafila M SR University, Hanumakonda, India

Geetha Manoharan https://orcid.org/0000-0002-8644-8871 SR University, Warangal, India

ABSTRACT

Green finance integrates climate resiliency and environmental sustainability into financial systems, addressing issues like resource depletion, climate change, and ecological degradation by promoting sustainable growth. This chapter explores tools like carbon markets, sustainability-linked loans and green bonds that encourage investment in green innovation, sustainable infrastructure, and renewable energy. It emphasises the importance of economic and energy balance through energy-efficient technologies and renewable energy sources. Despite challenges, the chapter uses a multidisciplinary approach involving stakeholder engagement and environmental economics to align green finance with global sustainability goals. Through analysis of regulations, financial systems, and case studies, it highlights green finance's critical role in building a robust, low-carbon economy. The insights aim to encourage governments, organisations, and individuals to adopt green finance for a sustainable future.

DOI: 10.4018/979-8-3373-0350-5.ch006

Copyright © 2026, IGI Global Scientific Publishing. Copying or distributing in print or electronic forms without written permission of IGI Global Scientific Publishing is prohibited.

INTRODUCTION

Green finance is emerging as a cornerstone for driving sustainable development, offering financial solutions that prioritize environmental preservation and climate resilience. By integrating environmental considerations into financial decision-making, green finance empowers business, governments, and individuals to adopt eco- friendly practices. This approach supports renewable energy projects, sustainable infrastructure, and conservation initiatives, aligning economic growth with ecological balance (Shukala, 2024) as the world faces pressing challenges like climate change and resources depletion, green finance plays a pivotal role in channeling investments towards innovative, sustainable solutions. This chapter explores the mechanisms, opportunities, and challenges of green finance in a sustainable future for generations to come. A nation might attain sustainable growth utilizing renewable energy resources. (Wang, Y., Han, M. (2024). Because of fragmented diverse and even opaque unclear and non-standardized methods of calibration and reporting, developmental progress is difficult to quantify. (Sengupta, U., Pramanik (2023). Financial systems and environmental sustainability, illuminating how green money enables people, organizations, and governments to embrace eco-friendly policies. Green financing stimulates investments in renewable energy, encourages creative solutions, and aids in the transition to a circular economy by bridging the gap between ecological responsibility and economic growth.

This chapter explores the concepts, tools, and difficulties of green finance through an interdisciplinary perspective, demonstrating how it may support environmental initiatives of the future and ensure a habitable earth for coming generations. Through environmental innovation, environmental policy mitigates the mediating impact of green finance on environmental sustainability. (Omri, H., Jarraya, B., (2025) Green innovation is a key financial mediator that strengthens the connections between environmental preservation, HDI, and financial practices. (Ghouse, G., Bhatti, M. 2024) One of the most important issues these nations must address is achieving sustainable economic development. (Xu, T., Yang, G., & Chen, T. (2024). A quantitative investigation is conducted into the nonlinear relationship between environmental sustainability and green money. (Gul, R., & Hussain, S. (2024). They are encouraged to adopt sustainable practices by green financing. (Appiah-Kubi, E., Koranteng (2024). 16 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage: www.igi-

global.com/chapter/green-finance-for-sustaining-

tomorrow/384154

Related Content

Ethical Issues for User Involvement in Technological Research Projects: Directives and Recommendations

Ainara Garzoand Nestor Garay-Vitoria (2015). *Contemporary Ethical Issues in Engineering (pp. 251-269).*

www.irma-international.org/chapter/ethical-issues-for-user-involvement-in-technologicalresearch-projects/125184

The Ripple Effect: How Workplace Incivility Fuels Employee Turnover Through Cynicism

Shikha Saloni, Neema Gupta, Ambuj Kumar Agarwaland Vishal Jain (2025). Advances in Ethical Work Climate and Employee Well-Being (pp. 461-480). www.irma-international.org/chapter/the-ripple-effect/373849

Ethical Leadership, Organisational Integrity, and Trust: A Theoretical Review and Integration

Willard Nyamubarwa (2025). Advances in Ethical Work Climate and Employee Well-Being (pp. 481-502).

www.irma-international.org/chapter/ethical-leadership-organisational-integrity-and-trust/373850

Social Media Analytics for Intelligence and Countering Violent Extremism

Jennifer Yang Hui (2016). *Combating Violent Extremism and Radicalization in the Digital Era (pp. 328-348).*

www.irma-international.org/chapter/social-media-analytics-for-intelligence-and-counteringviolent-extremism/150583

Mobile Journalism and Innovation: A Study on Content Formats of Autochthonous News Apps for Tablets

Marcos Palacios, Suzana Barbosa, Fernando Firmino da Silvaand Rodrigo da Cunha (2019). *Journalism and Ethics: Breakthroughs in Research and Practice (pp. 554-578).*

www.irma-international.org/chapter/mobile-journalism-and-innovation/226696