

Call-for-papers on Green Digital Finance for Achieving Sustainable Development Goals (book)

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Scopus

Outline: To meet obligations under the Paris Agreement and achieve sustainable development goals (SDGs), significant investments in renewable energy (RE) production and infrastructure are necessary worldwide. An estimated USD 5-7 trillion of annual investment will be needed to deliver on UN SDGs and the Paris Agreement on Climate Change (Brookings, 2016)¹. However, in 2017 and 2018, global investment in renewables and energy efficiency declined by 1 and 3%, respectively. There is a risk that it will slow further; clearly, fossil fuels still dominate energy investment (IEA, 2018)². This could threaten the expansion of green energy needed to provide energy security and to tackle climate change. (Sachs et al. 2019)³. In 2019, RE investment increased by 1% to 311 billion US\$. However, energy efficiency investments reduced from 252 billion US\$ to 249 billion US\$ (IEA, 2020). IEA estimated that in 2020 due to the COVID-19 pandemic and the global economic recessions, the ongoing investment in RE projects fell by around 10% for the year. Energy efficiency investment may fall by over 12% in 2020, mostly due to the 6% assumed decline in global economic growth, potentially in response to less available capital for efficiency projects and lower energy prices. Energy efficiency investment is not enough to meet sustainability goals and reduce the effort required from the energy supply⁴. The COVID-19 pandemic and the economic downturns resulted in a drastic reduction in fossil fuel prices. Low fossil fuel price is harmful to developing renewable energy projects, making solar, wind, and other RE resources less competitive electricity sources. This could threaten the expansion of green energy needed to provide energy security and meet SDG7 and SDG13. (Yoshino, Taghizadeh-Hesary, and Otsuka, 2020)⁵. Although most recently, several new green financing solutions such as green bonds, green banks, green credit guarantee, carbon taxation, carbon trade, village funds, community trust funds have been established in different countries, the aforementioned

¹ Brookings, 2016. Global Views, no. 5, sept 201. Links in the chain of sustainable finance. Accelerating private investments for the SDGs, including climate action

² International Energy Agency (2018b). Global energy investment in 2017 fails to keep up with energy security and sustainability goals. Retrieved on Nov 17, 2020 from <https://www.iea.org/newsroom/news/2018/july/global-energy-investment-in-2017-.html>

³ Sachs, J., W.T. Woo, N. Yoshino and F. Taghizadeh-Hesary (2019). Importance of green finance for achieving sustainable development goals and energy security. Handbook of Green Finance: Energy Security and Sustainable Development. J. Sachs, W.T. Woo, N. Yoshino and F. Taghizadeh-Hesary Eds. Tokyo: Springer

⁴ IEA (2020). World Energy Investment 2020. Paris: International Energy Agency

⁵ Yoshino, N., F. Taghizadeh-Hesary, M. Otsuka (2020). Covid-19 and Optimal Portfolio Selection for Investment in Sustainable Development Goals, *Finance Research Letters*,101695, <https://doi.org/10.1016/j.frl.2020.101695>

data shows that these are not sufficient, and alternative ways to finance projects are required. (Hyun, Park and Tian, 2020⁶, Taghizadeh-Hesary and Yoshino, 2019⁷; 2020⁸)

Technological innovation is already offering sustainability solutions across the financial system's five core functions: moving value, storing value, exchanging value, funding value creation; and managing value at risk. (UNDP, 2019)⁹. Increasing transparency, accountability, decentralization of the financial system, improving risk management, increasing competition, lowering the costs and improving efficiency, increasing the speed, increasing cross-sectoral collaboration and integration are the features that the financial technology (FinTech) can provide (UNDP, 2016). Artificial intelligence (AI), distributed ledger technologies (DLT) or blockchain, peer-to-peer lending platforms, big data, internet-based and mobile-based payments, Internet of Things (IoT), matchmaking platforms including crowdlending, tokenizing green assets are potential means to scale up the green finance for achieving the SDGs (Yoshino, Schlosser and Taghizadeh-Hesary, 2020)¹⁰. According to UNEP (2018),¹¹ AI could lift global GDP by US\$15-20 trillion by 2030. Securing the resilience of such an achievement, notably its environmental and social sustainability, may well be accomplished by digitalizing finance or 'digital finance.'

A literature review shows a gap in utilizing digital instruments and FinTech in green finance. Against this background, Yonsei University and Tokai University are organizing this call-for-papers to receive high-quality empirical, theoretical, or case study papers to be published in a book volume titled "**Green Digital Finance for Achieving Sustainable Development Goals.**" The book will be published by **Springer Nature** and indexed in **Scopus**.

Topics of interest in this book include, but are not limited to:

- How can the digital finance revolution drive sustainable development?
- How to best remove barriers for scaling green digital finance?
- What are the regulatory and legal requirements and solutions for green digital finance?
- What is the role of the governments in enhancing green digital finance?
- What are the risks associated with green digital finance, and how to cope with them?

⁶ Hyun S., D. Park and S. Tian (2020). Pricing of Green Labeling: A Comparison of Labeled and Unlabeled Green Bonds, *Finance Research Letters*, 2020, <https://doi.org/10.1016/j.frl.2020.101816>.

⁷ Taghizadeh-Hesary F., Yoshino N. (2019). The way to induce private participation in green finance and investment, *Finance Research Letters*, 31: 98-103, DOI: <https://doi.org/10.1016/j.frl.2019.04.016>

⁸ Taghizadeh-Hesary, F.; Yoshino, N. (2020). Sustainable Solutions for Green Financing and Investment in Renewable Energy Projects. *Energies*, 13, 788, DOI: <https://doi.org/10.3390/en13040788>

⁹ UNDP (2016). *Fintech and sustainable development: Assessing the implications*. United Nations Development Programme: New York

¹⁰Yoshino, N., T. Schloesser, and F. Taghizadeh-Hesary. (2020). Social funding of green financing: An application of distributed ledger technologies. *International Journal of Finance & Economics*, DOI: <https://doi.org/10.1002/ijfe.2108>

¹¹ UNEP (2018). *Green Digital Finance: Mapping Current Practice and Potential In Switzerland and Beyond*. United Nations Environment Programme: Geneva

- Case studies on utilizing digital finance and FinTech in funding green projects in different countries and sectors.
- Application of AI, DLT or blockchain, peer-to-peer lending platforms, big data, internet-based and mobile-based payments, IoT, matchmaking platforms including crowdlending and tokenizing green assets in scaling up the green finance
- Financial institutions and green digital finance

Submission Procedure

Contributors should submit their extended paper in English by **May 31, 2021**. The deadline is not extendable. The abstract should be about 1,000 words, including the title, name of author(s), affiliation(s), research background, motivation, and methodology, and expected policy implications. Abstracts should be submitted in word format to farhad@tsc.u-tokai.ac.jp and sukhyun@yonsei.ac.kr

The subject of the email message: "Submission to the CFP on Green Digital Finance book."

Successful applicants will be notified by **June 10, 2021**.

Accepted abstracts will be invited to present their full papers at a webinar to be organized by Yonsei University and Tokai University.

Date of webinar: June 30, 2021

Selected applicants must submit their full paper by **July 31, 2021**. The paper should be 8,000- 10,000 words in length, including references, and should have the following structure:

- Chapter title
- Author info (including co-authors): name, affiliation, address, and e-mail)
- Abstract (150-250 words)
- Keywords or keyword phrases (4-8 words)
- JEL classification code(s)
- Introduction
- Main text (split into various sections with heads and subheads chosen by authors)
- Conclusion and policy recommendations
- References (up to 50)
- Index terms (1-2 per manuscript page, highlight in green)

Tentative table of contents

“Green Digital Finance for Achieving Sustainable Development Goals”

Chapter 0 – Introduction by the Editors

Section 1. Opportunities, Challenges, and Solutions

Chapter 1. Role of green digital finance in meeting the sustainable development goals

Chapter 2. Analyzing the technical barriers and recommendations for removing them to scale up green digital finance.

Chapter 3. Assessing the risks associated with green digital finance and policies for coping with them.

Section 2. Regulatory and policy framework required for the green digital finance

Chapter 4. Regulatory and legal frameworks for promoting green digital finance

Chapter 5. Role of governments in the development of the green digital finance

Section 3. Recent progress in green digital finance in different countries and regions

Chapter 6. Recent progress in green digital finance in Asia

Chapter 7. Recent progress in green digital finance in China, Japan, and the Republic of Korea

Chapter 8. Recent progress in green digital finance in the ASEAN region

Chapter 9. Recent progress in green digital finance in India and South Asia

Chapter 10. Recent progress in green digital finance in Europe

Chapter 11. Recent progress in green digital finance in North and Latin America

Section 4. Role of financial institutions and Fintech in scaling up the green digital finance

Chapter 12. Role of banks and other financial institutions in enhancing the green digital finance

Chapter 13. Application of artificial intelligence, distributed ledger technologies/ blockchain in scaling up the green finance

Chapter 14. Role of peer-to-peer lending platforms in easing green finance

Chapter 15. Role of tokenizing green assets in boosting the green digital finance

Chapter 16. Application of big data and the Internet of Things in green finance