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ONE DAY NATIONAL SEMINAR

on

SUSTAINABLE FINANCE 2030: ROADMAP TO A REDEFINING AND TRANSFORMING ECONOMY

IN ASSOCIATION WITH GLOBAL FTI

CERTIFICATE OF APPRECIATION

This is to certify that Mr. / Ms. / Dr. S. BIRUNDHA

of PSG COLLEGE OF ARTS AND SCIENCE has Participated / Presented a paper entitled Sustainable finance 2030 Technical Integration In sustainable finance. in the One Day National Seminar on **"SUSTAINABLE FINANCE 2030: ROADMAP TO A REDEFINING AND TRANSFORMING ECONOMY"** organised by the Department of B Com (Accounting & Finance) and B.Com (Business Analytics), B.Com (Actuarial Management) and B.Com (Financial Services), PSGR Krishnammal College for Women, Coimbatore, held on 9th February 2026.

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National Seminar

on

Sustainable Finance 2030: Roadmap to a Redefining and Transforming Economy

9th February 2026

Chandra Seminar Hall,
KCW Campus



Editors
Dr.G.Rekha
Dr.K.Pavithra
Dr.S.Manasha
Dr.M.Shobana

Organized by
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24	Green Nudges and Behavioral Public Policy: A New Pathway for Sustainable Finance in India ***Yasmathi S, Brindha P & Ms. Amritha S***	106-110
25	Green Banking and Sustainable Lending Practices ***Dr Kowsalya S, Mr Ajay K & Mr Dharathi G***	111-114
26	Green Banking and Sustainable Lending Practices ***Mrs. M. Banurekha, Mr. Ugabharathi R M & Mr. V.V. Arun Prasanth***	115-120
27	Technological Integration in sustainable financial finance ***Mr.Jenifer V***	121-127
28	Employee Attrition and Its Influence on Productivity and Workforce Commitment in Manufacturing Organizations ***Mrs.G.Prabhavathi***	128-133
29	Technological Integration in Sustainable Finance ***Vimalraj D***	134-138
30	Challenges and Risks in Scaling Sustainable Finance ***Ms. K.Kalaivani & M.Dharun***	139-145
31	A Study on Financing the Substainable Development Goals and Nature based Solutions. ***Priyanka.S, Dhanyalakshmi.N& Rasika.S***	146-150
32	Green Banking and sustainable lending practice ***Dr.J.K Bharath & M.Radha***	151-155
33	Technological Integration in Sustainable Finance ***Dr. S. Birundha & Harini. K***	156-158

Technological Integration in Sustainable Finance

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Abstract

Addressing environmental, social, and governance (ESG) issues is largely dependent on sustainable finance. Technology integration has greatly improved risk assessment, efficiency, and transparency in sustainable financial practices. This study examines how technologies like blockchain, artificial intelligence, big data analytics, and fintech can be used to assess ESG performance, lessen greenwashing, and promote sustainable investments. In addition to facilitating efficient distribution of green capital, digital financial platforms also advance financial inclusion. To align financial systems with sustainable development goals and create a robust and inclusive financial ecosystem, the study concludes that technological integration is crucial.

Keywords: *Sustainable Finance, Technological Integration, ESG (Environmental, Social and Governance), FinTech, Artificial Intelligence, Blockchain, Green Finance, Digital Transformation*

Introduction

To support long-term economic growth, sustainable finance focuses on incorporating environmental, social, and governance (ESG) considerations into financial decision-making. The need for ethical and open financial practices has grown due to growing concerns about corporate governance, social responsibility, and climate change. By enhancing efficiency, transparency, and risk assessment, the incorporation of cutting-edge technologies has revolutionized sustainable finance. Artificial intelligence, blockchain, big data analytics, and fintech platforms are examples of technologies that facilitate sustainable investment, lessen greenwashing, and support ESG assessment.

Concept of Sustainable Finance:

Sustainable finance refers to a financial approach that integrates environmental, social, and governance (ESG) considerations into investment and financing decisions. Unlike traditional finance, which primarily focuses on short-term profitability, sustainable finance emphasizes long-term value creation and responsible economic growth. It promotes investments in areas such as renewable energy, climate-resilient infrastructure, social welfare projects, and ethical business practices. By aligning financial objectives with sustainable development goals, sustainable finance plays a crucial role in addressing global challenges such as climate change, environmental degradation, income inequality, and corporate misconduct. As governments, investors, and institutions increasingly recognize the interconnectedness of financial stability and sustainability, sustainable finance has become a key pillar of modern financial systems.

Need for Technological Integration:

Traditional financial systems often struggle to include sustainability in their decision-making. They mainly rely on past financial data and ignore important non-financial ESG indicators that affect long-term risk and performance. Poor disclosure standards, inconsistent ESG data, and weak monitoring systems make it tough to assess sustainability risks accurately. This lack of clarity raises the risk of greenwashing, where companies exaggerate their environmental or social performance. Additionally, manual data handling and scattered reporting systems cut down on efficiency and reliability. These issues show the pressing need for new tools and frameworks that can improve transparency, data quality, and accountability in sustainable finance.

Role of Emerging Technologies:

Technological innovation has become a strong solution to address the gaps in traditional finance. Artificial Intelligence (AI) and Big Data analytics allow financial institutions to process large amounts of structured and unstructured ESG data. They help identify patterns and predict climate-related and social risks. These technologies improve the quality of sustainability assessments and support fact-based investment choices. Blockchain technology builds trust by providing secure, clear, and permanent records of transactions related to green bonds, carbon credits, and sustainable supply chains. Additionally, FinTech platforms make it easier to handle digital payments, green lending, peer-to-peer financing, and impact investing. This boosts access to sustainable financial products and increases market efficiency.

Technology as an Enabler of Sustainable Growth:

The integration of technology into sustainable finance improves operational efficiency and drives systemic change in financial markets. Digital tools strengthen sustainability reporting, regulatory compliance, and risk management practices, which boosts investor confidence. Technology also promotes financial inclusion by allowing underserved populations and small businesses to access green finance and digital financial services. By improving transparency, accountability, and scalability, integrating technology helps direct capital toward sustainable activities and supports the shift to a low-carbon, inclusive, and resilient economy. Therefore, technology plays a key role in connecting financial innovation with long-term sustainable development goals.

Conclusion

Technological integration has become an essential component of sustainable finance in the modern financial ecosystem. By enhancing transparency, improving ESG risk assessment, and enabling efficient allocation of green capital, technology supports responsible financial decision-making. The combined use of AI, blockchain, and FinTech solutions accelerates the shift toward a low-carbon, inclusive, and resilient economy. Therefore, integrating technology with sustainable finance is not only an innovation-driven approach but also a necessity for achieving long-term sustainable development.

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