

INDIA'S GREEN FINANCE JOURNEY TOWARDS SUSTAINABLE DEVELOPMENT

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Abstract

India's efforts to balance rapid economic growth with environmental sustainability have placed green finance at the centre of national policy and development strategy. This study explores the evolution and strategic relevance of green bonds and sustainable finance in shaping India's path towards low-carbon, climate-resilient development. Drawing from regulatory, sectoral, and market-level data since the launch of India's green bond market in 2015—including the pivotal issuance of sovereign green bonds in 2023—the paper analyses how financial instruments have supported renewable energy, sustainable transport, water management, and green urban infrastructure. It critically examines the roles played by the Reserve Bank of India (RBI), the Securities and Exchange Board of India (SEBI), and financial institutions in fostering ESG-aligned investment practices. The research also identifies persistent barriers, such as limited investor awareness, high certification costs, and the absence of a unified taxonomy. By comparing India's experience with global best practices from the EU, China, and ASEAN, the study offers a forward-looking policy roadmap aimed at strengthening disclosure, expanding access, and deepening market participation. Ultimately, the paper argues that a resilient, transparent, and inclusive green finance ecosystem is essential for India to align economic growth with its climate commitments and sustainable development vision.

Keywords:

Green Bonds, Sustainable Finance, ESG Integration, Climate Action, India, Low Carbon Economy, Green Taxonomy, Net Zero.

1. INTRODUCTION

Today, India is in a position of juggling a compelling narrative of growth with pressing obligations to environmental stewardship. Over the past two decades, rapid economic growth has helped lift millions out of poverty, with unprecedented investment in multiple sectors, including infrastructure, health, and education (Khan, 2023). India's development, however, has come with environmental costs, including polluted air and water, the loss of biodiversity, and growing risks from climate-related disasters (International Energy Agency [IEA], 2023).

This *dilemma of growth versus degradation* is particularly urgent for India, given that nearly one-third of GDP is derived from the use of natural resources in the sectors of agriculture, forestry, fish, and energy (Climate Policy Initiative [CPI], 2024). Importantly, these sectors directly support jobs and national income and are the most vulnerable to climate impacts. For instance, *agriculture productivity could decrease as much as an estimated 16% by 2030 alone because of climate shocks that will affect both GDP and livelihoods* (CPI, 2024).

India has taken bold steps to address this dual challenge. Under the Paris Agreement, it committed to reducing emissions intensity of GDP by *45% from 2005 levels and achieving 50% of power capacity from non-fossil sources by 2030*. At COP26, India announced its intention to *reach net-zero emissions by 2070* (Reserve Bank of India [RBI], 2024). Domestically, the country has aligned its strategies with the Sustainable Development Goals (SDGs), particularly those focused on climate action, clean energy, and sustainable infrastructure (IEA, 2023).

In this context, *green finance has emerged as a critical enabler* of India's sustainability transition. Instruments such as green bonds, ESG-aligned lending, and climate-linked investment vehicles are channeling capital into projects that support low-carbon infrastructure, renewable energy, water conservation, and green mobility. Since 2015, India's green bond market has developed progressively with support from Securities and Exchange Board of India (SEBI) and the Reserve Bank of India (RBI). The SEBI and RBI adopted regulatory initiatives and guidelines to strengthen transparency and diminish the potential for greenwashing (SEBI, 2023).

This paper discusses the growth, challenges, and future of green finance in India as it pertains to major sectors such as energy, transport, buildings, and agriculture and the role of regulatory institutions to promote the development of the market. This will also include significant challenges that continue to penetrate the green finance market, such as limited investor knowledge and a lack of standardised taxonomies, among other things. The research adds to the discussion by situating India's experience within global experiences, particularly those of the EU, China, and ASEAN, to provide policy recommendations for India's capacity to enhance its green finance ecosystem in alignment with its national developmental and climate ambitions.

2. LITERATURE REVIEW

Green finance is receiving increased attention worldwide as an avenue for financing sustainable development that can influence financial flows towards environmental aims. The instruments of green finance, namely, green bonds, climate-linked loans, and ESG investments, are used to mobilise capital for climate change mitigation, clean energy, and environmental resilience (Climate Bonds Initiative, 2023)

2.1 EVOLUTION OF GREEN FINANCE AND GREEN BONDS

The evolution of green finance is a function of the acknowledgement of environmental risk to systemic global economic markets. The global green bond market has fundamentally relied on a series of developments that began in the late-2000s when multilateral development banks like the World Bank issued green bonds. By the mid-2010s, countries began to develop national green bond frameworks, which led to the inclusion of public and private climate considerations in the economy (de la Rue du Can et al. 2019). In the context of India, the first instance of a green bond was issued by Yes Bank in 2015. This was shortly followed by regulatory initiative to support green bond markets published by the Securities and Exchange Board of India (SEBI). In 2016, SEBI published the Green Debt Securities (GDS) guidelines to clarify where climate-supporting projects could be undertaken as well as areas to support transparency for green bond and other GDS issuers (SEBI, 2023).

In the following timeframe, green bonds have been used to finance renewable energy schemes, public transport infrastructure, energy-efficient buildings, and integrated sustainable water in India. Notably, with the issuance of new sovereign green bonds in 2023, green bonds have solidified credibility and continue to capture the attention of the domestic green finance market and policies that recognize climate change risks (Kataria, 2024).

2.2 REGULATORY FRAMEWORK AND INSTITUTIONAL ROLE

SEBI's Green Debt Securities framework has been instrumental in creating a standardised issuance and reporting approach in India. The guidelines require issuers to describe the intended use of proceeds, environmental objectives, and periodic impact assessments to limit the ability of greenwashing to occur and enhance investor confidence (SEBI, 2023). Similarly, the Reserve Bank of India (RBI) has also encouraged banks to promote sustainable lending, by including renewable energy as subject to priority sector lending and initiating steps to identify climate risks across banking portfolios (RBI, 2024).

The introduction of ESG integration across lending and investment practices is another notable shift. Major Indian banks have established ESG committees and sustainability frameworks to guide internal policies and stakeholder reporting (Bhowmick & Chatterjee, 2023). However, the lack of a unified green taxonomy remains a gap, often leading to inconsistency in project classification and impact measurement (Loganathan, 2022).

2.3 SECTORAL APPLICATIONS AND IMPACT

Green finance in India has primarily supported *five key sectors*: renewable energy, clean transportation, green buildings, water and sanitation, and sustainable agriculture. Literature suggests that investments in solar and wind projects, electric mobility, LEED-certified infrastructure, and efficient irrigation systems have enabled both environmental benefits and economic co-benefits such as job creation, energy security, and improved public health (Islam & Managi, 2019; Ding et al., 2023).

For example, metro rail systems and EV infrastructure supported through green bonds have helped reduce urban emissions and promote sustainable urban mobility (Deshwal et al., 2022). Similarly, green building projects have contributed to reduced energy consumption and healthier indoor environments (Pandey, 2022). These outcomes align with SDGs related to clean energy, sustainable cities, climate action, and responsible production.

2.4 GLOBAL LESSONS FOR INDIA

Comparative studies provide some valuable lessons for India from various global experiences. The *European Union* has implemented a legally binding green taxonomy and compliance disclosures which have reduced ambiguity and trust issues with investors (S et al., 2024). *China* has stimulated rapid growth in the market through outright state action, and had sectoral taxonomies, though in many instances, their definitions do not align with global taxonomy standards (Ding et al., 2023). On the other hand, *ASEAN* has instituted regionally harmonised green bond standards that have stimulated cross-border investment and market opportunities.

In these examples regulatory clarity, education of investors, and effective monitoring systems are important lessons. In India's context, establishing a nationally harmonised taxonomy, regulatory compliance on disclosures, and increasing uptake from investors previously not participating in green finance (such as retail and domestic institutional investors), will be essential to scaling green finance.

2.5 BARRIERS IDENTIFIED IN EXISTING LITERATURE

While regulatory support has been achieved, *challenges continue to exist*. There remains a lack of awareness of green financial instruments for investors, especially retail investors. High costs related to third-party certification and impact reporting deter smaller issuers (Prabhu & Mukhopadhyay, 2023). Moreover, the absence of uniform classification standards hampers market integrity and complicates impact evaluation.

Scholars have also flagged the underdevelopment of India's domestic ESG industry. Limited access to quality sustainability data, lack of technical capacity among financial institutions, and insufficient market depth continue to restrict the scale and scope of green finance (Loganathan, 2022; Udemba, 2023).

3. RESEARCH METHODOLOGY

This study adopts a *descriptive, qualitative approach* based entirely on *secondary data*. The objective is to evaluate the evolution, scope, regulatory frameworks, sectoral impact, and prospects of green finance in India, with a specific focus on green bonds. Rather than generating new empirical data, the study synthesises insights from government publications, institutional reports, academic journals, and regulatory documents.

3.1 DATA SOURCES

Information has been drawn from a wide range of reliable sources, including:

- Official publications from the *Reserve Bank of India (RBI)* and *Securities and Exchange Board of India (SEBI)*
- Reports by international organisations such as the *International Energy Agency (IEA)*, *Climate Bonds Initiative (CBI)*, and *United Nations*
- Academic research published in peer-reviewed journals and policy papers from Indian think tanks and institutions

These sources have been selected for their credibility, relevance to India's green finance framework, and alignment with global sustainability principles. The research attempted to cite documents that are publicly available and all traceable to provide transparency and replicability.

3.2 METHOD OF ANALYSIS

The analysis is primarily *thematic and content-based*, involving:

- *Descriptive synthesis* of trends in India's green bond market from 2015 to 2023
- *Interpretive analysis* of regulatory frameworks issued by SEBI and RBI
- *Comparative insights* from global green finance models in the EU, China, and ASEAN
- *Sectoral mapping* of how green finance has influenced key areas such as energy, transport, buildings, water, and agriculture

This approach enables the study to link policy developments with financial trends and environmental outcomes. Content from reports was coded for recurring patterns related to barriers, institutional roles, disclosure norms, and impact measurement strategies.

3.3 SCOPE AND LIMITATIONS

The study is limited to the period between *2015 and 2023*, with particular attention to the issuance of sovereign green bonds in 2023. No primary fieldwork, interviews, or surveys were conducted. As such, the analysis does not capture stakeholder perceptions or the most recent unpublished developments.

While this desk-based methodology provides a robust view of India's green finance journey, it relies on the accuracy and availability of published data. Gaps in disclosure, outdated information, or lack of standardised reporting in some areas may limit the granularity of the findings. However, by drawing from diverse, triangulated sources, the study offers a balanced and policy-relevant view of the current landscape.

3.4 ETHICAL CONSIDERATIONS

This research involves no human participants and does not engage with any confidential data. All sources are properly cited in accordance with academic integrity norms and APA 7th referencing style.

4. OBJECTIVES OF THE STUDY

This study aims to examine the evolving role of green finance, particularly green bonds, in supporting India's sustainable development agenda. The specific objectives are as follows:

- *To trace the development of India's green bond market* from its inception in 2015 to the sovereign issuances in 2023, with a focus on issuance trends, sectoral allocations, and institutional participation.
- *To analyse the regulatory role of SEBI and RBI* in shaping India's green finance ecosystem through frameworks, disclosure norms, and ESG-related guidelines.
- *To assess the sectoral impact of green finance*, especially in areas such as renewable energy, clean transportation, energy-efficient buildings, water and sanitation, and sustainable agriculture.
- *To identify barriers* to the mainstreaming of green finance in India, including issues of investor awareness, high certification costs, and the absence of a unified green taxonomy.
- *To draw policy insights from global practices* particularly from the EU, China, and ASEAN, to propose a roadmap for strengthening India's green finance architecture.

5. SIGNIFICANCE OF THE STUDY

As India advances towards its net-zero commitments and SDG targets, *green finance plays a pivotal role in aligning economic growth with environmental sustainability*. This study offers timely insights into how financial systems can be mobilised to support climate-resilient infrastructure, while also identifying the institutional, regulatory, and behavioural challenges that must be addressed.

By combining sectoral analysis with international comparisons, the research contributes to the growing discourse on sustainable finance in emerging economies. It also serves as a reference for policymakers, regulators, financial institutions, and scholars interested in designing inclusive and transparent green finance ecosystems.

6. RESEARCH IN DETAIL

6.1 SECTORAL IMPACT OF GREEN FINANCE IN INDIA

Green finance has steadily shaped India's transition towards a low-carbon economy by directing investments into priority sectors. This section analyses how green bonds and sustainable finance have impacted five key

areas: renewable energy, clean transportation, green buildings, water and sanitation, and sustainable agriculture.

6.1.1 RENEWABLE ENERGY

Renewable energy has been the largest beneficiary of green bond proceeds in India. These funds have supported the development of solar parks, onshore and offshore wind farms, and hybrid renewable energy projects. Such investments have contributed to expanding India's non-fossil energy capacity, in line with the national target of 500 GW by 2030 (Islam & Managi, 2019).

Green finance also provided support for the expansion of transmission to support energy. It supports the manufacturing of solar panels, wind power turbines, and the associated job creation domestically for the new energy-based economies. Green finance support has also connected rural and semi-urban communities to cleaner sources of power reducing the reliance on polluting fuels which improves quality of life (Kumar, 2022).

6.1.2 CLEAN TRANSPORTATION

Green bonds have also been a critical source of support to India's transition to low emissions public transport. Metro rail and other mass transit projects are now being financed through sustainable debt instruments in cities like Delhi, Pune, and Bangalore. A mass transit system reduces urban traffic and air pollution while improving energy-efficient mass mobility (Deshwal et al., 2022).

Further, green finance is supporting the deployment of electric bus transit systems, charging infrastructure for electric buses, and new e-mobility pilot programmes. The investments are critical for cities as they try to mitigate carbon emissions while tackling city-wide mobility challenges at the same time. Programmes like FAME India (Faster Adoption and Manufacturing of Hybrid and Electric Vehicles) have been incredibly successful despite limited public funding, relying on private sector investment leveraged by green loans and ESG-linked funds to fill the gap (Kumar, 2024).

6.1.3 GREEN BUILDINGS

Green finance has catalyzed the construction and retrofitting of energy-efficient residential and commercial buildings. Financing has been deployed for energy-saving lighting and HVAC systems, high-performance insulation, water-efficient technologies, and other installations to facilitate energy efficiency. Projects often seek green certifications (e.g. GRIHA, LEED), which contribute to transparency and performance standards (Pandey, 2022).

Green buildings, by lowering energy demand in urban areas, yield emission reduction, long-term savings, and healthier indoor environments. The multiplier effect extends to the demand for eco-friendly construction materials and even the emergence of a skilled green workforce.

6.1.4 WATER & SANITATION

Urbanisation and water stress are prominent challenges facing India, and thus the water and sanitation sector is a significant focus of sustainable financing. Green bonds have financed the construction of decentralized water systems, sewage treatment plants, and wastewater recycling plants, especially in water-stressed or peri-urban regions.

Green financing initiatives in this sector have increased access to clean drinking water, reduced pollution of water bodies, and supported public health outcomes. Green finance to support smart water systems has also introduced digital monitoring tools that help utilities monitor consumption, identify leaks in real time, and manage limited resource use (Deshwal et al., 2022).

6.1.5 SUSTAINABLE AGRICULTURE

Agriculture in India is extremely vulnerable to climate change. Green finance has enabled a range of climate-resilient practices, including micro-irrigation, organic farming, and soil conservation practices. Furthermore, evidence is emerging of the introduction of solar-powered pumps, energy-efficient cold-storage, and crop diversification through green finance. These practices lead to more reliable yields, decreased input costs (e.g. expenditure on pesticides and artificial fertilizers), and the improved resilience of small and marginal farmers. The financing models include sustainability-linked loans and blended finance models, thus including a wider range of farmer and farming community acceptance of sustainability linked finance (Paliwal et al., 2021). The opportunities associated with these projects address food security and strengthen rural livelihoods, while supporting SDG targets regarding zero hunger and climate action.

6.2 KEY BARRIERS IN INDIA'S GREEN FINANCE ECOSYSTEM

Although India's green bond market has shown potential growth and there have been enabling policies, there are still barriers preventing the mainstreaming of green finance. These include regulatory gaps, limited investor participation, high compliance costs, and weak institutional capacity.

6.2.1 LOW AWARENESS AND LIMITED DEMAND

Green finance instruments remain poorly understood beyond institutional circles. Retail investors and even many domestic institutions lack awareness about green bonds or their risk-return profiles. This reduces market liquidity, limits secondary trading, and disincentivizes issuers from entering the market (Loganathan, 2022).

6.2.2 HIGH CERTIFICATION AND REPORTING COSTS

Complying with green bond frameworks often involves third-party verification, impact assessments, and ongoing reporting. These requirements are costly and disproportionately affect smaller issuers such as municipal bodies or MSMEs, discouraging their participation in green finance (Prabhu & Mukhopadhyay, 2023).

6.2.3 ABSENCE OF A UNIFIED GREEN TAXONOMY

A nationally accepted definition of what qualifies as a 'green' project is still evolving. The absence of a common taxonomy results in inconsistent standards across issuers, raises concerns of greenwashing, and makes it difficult to assess the true environmental value of investments (Loganathan, 2022).

6.2.4 UNDERDEVELOPED ESG INFRASTRUCTURE

India's ESG ecosystem is still in its early stages. Many banks, NBFCs, and asset managers lack internal systems to assess climate risks or incorporate ESG metrics into lending and investment decisions. This limits the supply of credible green financial products (Udemba, 2023).

6.3 KEY GLOBAL LESSONS FOR INDIA

Countries with more mature green finance markets offer useful insights for India's transition.

6.3.1 EUROPEAN UNION (EU)

The EU has introduced a legally binding green taxonomy, specifying sustainable economic activities. The EU has an approach of demanding comprehensive impact disclosures and verifications that limit ambiguity and improve investor confidence. This has contributed to helping create one of the world's most liquid and credible green bond markets (S et al., 2024).

6.3.2 CHINA

China has taken a directed state model, rapidly mobilising capital through compulsory sectoral taxonomies and preferential policies. While some of its green definitions diverge with international definitions of green, China's model highlights how policy coherence can cut across the developments of an entire sustainable investment agenda (Ding et al., 2023).

6.3.3 ASEAN

The ASEAN Green Bond Standards are a regionally aligned framework that strikes a balance between flexibility and credibility. This promotes innovation locally in sustainable finance while supporting cross-border investment.

6.4 SUMMARY OF LITERATURE REVIEW

Although there is potential for growth in green finance in India, it is still not fully realized mainly due to limited market depth, excessive fragmented standards and weak institutional capacity. Furthermore, evidence from international experiences indicates that there are three important aspects to consider moving forward with green finance regulatory frameworks. These include clarity on regulations, keeping transaction costs low to comply and broadening stake holding and investment.

As India ramps up its climate action agenda, addressing these structural barriers will be critical. The next section outlines a strategic policy roadmap to deepen the reach and impact of green finance across sectors and geographies.

7. POLICY RECOMMENDATIONS AND ROAD MAP

India will need to build a policy environment for green finance to fully unlock its potential. These policies should promote participation, reduce barriers and, ultimately, provide credibility. The following roadmap frameworks the key interventions to strengthen the green finance ecosystem.

7.1 EXPAND RETAIL AND DOMESTIC INSTITUTIONAL PARTICIPATION

While green finance needs to extend beyond institutional actors, introducing *low denomination green savings bonds*, tax credits or incentives, and simplified disclosures can spur retail participation. Implementing domestic awareness and financial literacy programmes around climate-linked investments can also astutely broaden the base of domestic participation, engagement and offering.

7.2 ESTABLISH A NATIONAL GREEN FINANCE TAXONOMY

India should prioritise the rollout of a *comprehensive, sector-specific green taxonomy* based on international best practices while reflecting national development goals. A unified classification system will:

- Improve transparency and comparability
- Preventing greenwashing
- Guide both issuers and investors with clarity

The taxonomy should be designed through public consultation and piloted with large public sector issuers.

7.3 SUPPORT GREEN FINANCE ACCESS FOR MSMEs AND URBAN LOCAL BODIES

Municipal corporations and MSMEs often lack the technical and financial capacity to issue green bonds. To address this:

- Offer *credit enhancement* tools and pooled bond models
- Simplify reporting requirements for smaller entities
- Provide *technical assistance* and advisory support for green project structuring

Decentralizing green finance to Tier-2 and Tier-3 cities will help spread the benefits of sustainable development beyond metro regions.

7.4 STANDARDISE DISCLOSURES AND IMPACT REPORTING

Mandating uniform disclosure formats for all green finance instruments, modelled after SEBI's framework, will ensure transparency. Establishing a centralised green finance data portal can improve access to information, track environmental outcomes, and build market trust.

7.5 PROMOTE FINANCIAL INNOVATION

India should scale up innovative instruments such as:

- *Sustainability-linked bonds and loans*: where financial terms depend on achieving environmental KPIs
- *Transition finance*: to support emission-intensive sectors in adopting low-carbon technologies
- *Blended finance models*: combining public, philanthropic, and private capital to de-risk high-impact green projects

These tools can help attract new investors and support sectors currently left out of green capital flows.

7.6 STRENGTHEN REGULATORY COORDINATION

A cross-regulatory green finance taskforce involving SEBI, RBI, Ministry of Finance, and Ministry of Environment can ensure coherence in standards, monitoring, and enforcement. Joint policy papers, market consultations, and alignment with global reporting frameworks like TCFD or ISSB will boost credibility and readiness for global capital.

7.7 ROADMAP TO 2047: TOWARDS A GREEN FINANCIAL SYSTEM

Looking ahead to India@2047, the country must aim for *a financial system where environmental sustainability is embedded in every investment decision*. This will require sustained effort in:

- Institutional capacity-building

- Green capital market deepening
- Regulatory evolution
- Tech-driven impact measurement

By embedding sustainability in the DNA of its financial system, India can not only meet its climate commitments but also emerge as a global leader in green growth.

8. CONCLUSION

At present, India's green finance story exemplifies both climate urgency and sustainable transformation opportunity. In the past ten years, green instruments such as bonds have been used as a means of directing capital to critical but low-resilience sectors including renewable energy, urban mobility, water systems, buildings, and agriculture. This has enabled financing (and environmental provision) while supporting jobs creation, energy access, and long-term resilience.

However, considerable challenges remain. The lack of investor awareness, lack of standardisation, high transaction costs, and undeveloped ESG ecosystem mean that market growth has been stifled. To scale green finance to comply with India's net-zero targets and Sustainable Development Goals, these challenges need to be addressed.

With lessons from global examples in the EU, China, and ASEAN, this research highlights a recognised need for a nationally harmonised green taxonomy, more comprehensive disclosure norms for green finance, and increased participation in the green finance market. The use of sustainability-linked bonds, blended finance, and even innovation with new instruments will deepen the green finance market and facilitate the transition of difficult-to-abate sectors to low carbon solutions.

Going forward, green financing must be at the strategic core of India's development approach. Looking towards 2047, the centenary anniversary of Indian Independence, a robust, transparent, and inclusive green finance ecosystem is vital for unlocking economic potential and building an environmentally secure and resilient end state.

Conflict of Interest

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9. REFERENCES

- Bhowmick, S., & Chatterjee, D. (2023). Reimagining urban infrastructure for G20: India's Mission LiFE for sustainable cities. *Environment and Urbanization ASIA*, 14(2), 159–175. <https://doi.org/10.1177/09754253231193174>
- Climate Bonds Initiative. (2023). Green finance market trends and future opportunities. <https://www.climatebonds.net/>
- de la Rue du Can, S., Khandekar, A., Abhyankar, N., Phadke, A., Khanna, N. Z., Fridley, D., & Zhou, N. (2019). Modeling India's energy future using a bottom-up approach. *Applied Energy*, 238, 1109–1125. <https://doi.org/10.1016/j.apenergy.2019.01.065>
- Deshwal, D., Sangwan, P., & Dahiya, N. (2022). Economic analysis of lithium-ion battery recycling in India. *Wireless Personal Communications*, 124(4), 3567–3584. <https://doi.org/10.1007/s11277-022-09512-5>
- Ding, C., Awosusi, A. A., Abbas, S., & Ojekemi, O. R. (2023). Formulating ecological sustainability policies for India within the coal energy, biomass energy, and economic globalisation framework. *Environmental Science and Pollution Research*, 30(52), 78873–78888. <https://doi.org/10.1007/s11356-023-30243-y>
- International Energy Agency. (2023). India energy outlook 2023. <https://www.iea.org/reports/india-energy-outlook-2023>
- Islam, M., & Managi, S. (2019). Green growth and pro-environmental behaviour: Sustainable resource management using natural capital accounting in India. *Resources, Conservation and Recycling*, 145, 205–215. <https://doi.org/10.1016/j.resconrec.2019.02.027>
- Kataria, K. (2024). India's odyssey to sustainable energy triumph – Assessing the impact of access to energy and renewable power. *Journal of Law and Sustainable Development*, 12(1), 35–48. <https://doi.org/10.55908/sdgs.v12i1.2267>
- Khan, U. (2023). Effects of oil consumption, urbanisation, and economic growth on greenhouse gas emissions: India via quantile approach. *International Journal of Energy Economics and Policy*, 13(3), 135–143. <https://doi.org/10.32479/ijeep.14225>

- Kumar, A. (2024). Environmental sustainability for Atmanirbhar Bharat. *International Journal for Multidisciplinary Research*, 6(1), 44–56. <https://doi.org/10.36948/ijfmr.2024.v06i01.13000>
- Kumar, N. (2022). Indian economy@75: Achievements, gaps and aspirations for the Indian centenary. *Indian Economic Journal*, 70(3), 321–340. <https://doi.org/10.1177/00194662221105552>
- Loganathan, M. (2022). Assessing social sustainability in the gig economy. *Indian Journal of Labour Economics*, 65(3), 739–757. <https://doi.org/10.1007/s41027-022-00399-1>
- Paliwal, P., Sengupta, A., & Dixit, N. (2021). Sustainable growth of Indian coal industry: Policy perspectives and recommendations. *Journal of Mines, Metals and Fuels*, 69(2), 45–51. <https://doi.org/10.18311/jmmf/2021/27331>
- Pandey, N. (2022). Challenges to social and legal health in achieving sustainable development goals. *International Journal of Health Sciences*, 6(5), 117–124. <https://doi.org/10.53730/ijhs.v6ns5.11274>
- Prabhu, V. S., & Mukhopadhyay, K. (2023). Macro-economic impacts of renewable energy transition in India: An input–output LCA approach. *Energy for Sustainable Development*, 74, 110–122. <https://doi.org/10.1016/j.esd.2023.04.006>
- Reserve Bank of India. (2024). Report on currency and finance: Towards a net-zero economy. <https://www.rbi.org.in/>
- S, L., K.R.A, B., R, G. K., Bhat, P. K., & A, S. N. (2024). Corporate social responsibility and sustainable development goals: Evidence from responsible business leaders. *Journal of Global Responsibility*, 15(4), 437–454. <https://doi.org/10.1108/JGR-06-2023-0109>
- Securities and Exchange Board of India. (2023). Consultation paper on ESG rating providers for securities markets. <https://www.sebi.gov.in/>
- Udemba, E. N. (2023). Cushioning environmental damage with institutions and FDI: Study of sustainable development goals (SDGs). *Environment, Development and Sustainability*, 25(9), 8621–8640. <https://doi.org/10.1007/s10668-022-02484-3>
- United Nations. (2023). SDG financing for developing economies. <https://sdgs.un.org/>