ORIGINAL ARTICLE

INTERNATIONAL JOURNAL OF ARTIFICIAL INTELLIGENCE

ISSN: 2692-515-x, Impact Factor: 9.23

American Academic publishers, volume 6, issue 01,2026

Journal: https://www.academicpublishers.org/journals/index.php/ijai

THE PRACTICE OF ATTRACTING INVESTMENTS IN GREEN TECHNOLOGIES: FOREIGN EXPERIENCE AND IMPLICATIONS FOR SUSTAINABLE DEVELOPMENT

Bobojonova M.J.

Asia International University

Annotation: Attracting investments in green technologies is a critical prerequisite for achieving sustainable development and mitigating environmental degradation. International experience demonstrates that green investments, particularly foreign direct investment (FDI), play a decisive role in promoting environmentally friendly technologies, enhancing resource efficiency, and accelerating technological innovation. This article examines foreign practices of attracting investments in green technologies, with a focus on inward and outward FDI, green finance instruments, environmental regulation, and institutional factors. Using a qualitative analytical approach based on international empirical studies, the paper systematizes the mechanisms through which green investments influence sustainable development. The findings indicate that green FDI, technology transfer, managerial foreign experience, and supportive regulatory environments significantly stimulate green innovation and environmental performance. The study contributes to the growing literature on green finance by identifying policy-relevant lessons for countries aiming to strengthen their green investment frameworks.

Keywords: green technologies; green investment; foreign experience; sustainable development; foreign direct investment; green innovation

The global economy is increasingly oriented toward sustainable development due to intensifying environmental challenges, climate change, and resource scarcity. In this context, green technologies have become a fundamental driver of economic transformation, enabling reductions in carbon emissions, efficient resource utilization, and environmental protection. However, the large-scale deployment of green technologies requires substantial financial resources, which are often limited in developing and transition economies.

Foreign experience shows that attracting investments in green technologies depends on the integration of green finance, foreign direct investment, and supportive institutional frameworks. Green investments are defined as the allocation of capital to environmentally friendly projects and firms that prioritize sustainability and natural resource conservation . Therefore, analyzing international practices is essential for understanding how investment mechanisms can support the transition toward a green economy.

A growing body of literature highlights the role of green investments in fostering sustainable economic growth. Studies demonstrate that green FDI contributes to improved environmental quality and technological upgrading, particularly in developing countries . Empirical evidence from multiple economies indicates that inflows of green finance accelerate industrial restructuring and innovation, thereby supporting long-term sustainability.

At the same time, the impact of FDI on green development is not uniform. Research on BRICS countries suggests that FDI may exert short-term and long-term negative effects on green consumption, reflecting the complexity of investment–environment interactions . This

ISSN: 2692-515-x, Impact Factor: 9.23
American Academic publishers, volume 6, issue 01,2026
Journal: https://www.academicpublishers.org/journals/index.php/ijai

highlights the importance of appropriate policy design to ensure that foreign investments align with environmental objectives.

This study employs a qualitative research methodology based on a systematic review and synthesis of international empirical studies, policy reports, and conceptual models related to green investment and sustainable development. The analysis focuses on:

- The role of inward and outward FDI in green technology development
- Technology transfer and spillover effects
- Institutional and regulatory determinants of green investment
- Managerial and market-level factors influencing green innovation

This approach enables the identification of common patterns and best practices across different economic contexts.

Foreign direct investment plays a central role in promoting green technologies by facilitating capital inflows, technology transfer, and managerial expertise. Green FDI has been shown to improve environmental quality in less developed economies by introducing cleaner production methods and advanced technologies . Moreover, outward foreign direct investment (OFDI) generates reverse spillover effects, allowing firms to acquire green technologies abroad and apply them domestically.

Evidence from countries participating in international investment initiatives demonstrates a “green halo effect,” whereby OFDI enhances green technology innovation and urban green productivity. The effectiveness of these spillovers depends on factors such as human capital, institutional quality, and economic development levels.

Green technology transfer is a key mechanism linking investment to sustainable development. Research indicates that research and development (R&D) support positively influences green technology transfer, which in turn promotes sustainable innovation. Foreign collaboration further strengthens this relationship by enhancing knowledge exchange and innovation capacity.

In manufacturing sectors, green growth is driven by a combination of independent R&D activities and the adoption of domestic and foreign technologies. These findings confirm that investment alone is insufficient without complementary innovation policies.

Environmental regulation plays a moderating role in shaping the effectiveness of green investments. Well-designed regulatory frameworks encourage firms to adopt green technologies and invest in innovation. Media attention and public awareness further influence corporate behavior by increasing reputational incentives for environmental responsibility.

Additionally, firms led by executives with foreign experience demonstrate higher levels of green innovation, particularly in regions with strong market-supporting institutions. This underscores the importance of human capital and governance quality in maximizing the benefits of green investments.

ISSN: 2692-515-x, Impact Factor: 9.23
American Academic publishers, volume 6, issue 01,2026
Journal: https://www.academicpublishers.org/journals/index.php/ijai

The foreign experience of attracting investments in green technologies demonstrates that sustainable development is best achieved through a coordinated approach combining green finance, foreign direct investment, technological innovation, and institutional support. Green FDI and OFDI play complementary roles by facilitating capital flows and knowledge spillovers, while environmental regulation and managerial capabilities enhance innovation outcomes.

The study highlights that countries seeking to expand green investment must prioritize regulatory stability, support technology transfer, and strengthen institutional frameworks. These findings provide valuable insights for policymakers and contribute to the academic discourse on green investment and sustainable economic development.

References.

1. OECD. *Green Finance and Investment: Mobilising Capital for Sustainable Growth*. Paris, 2023.
2. IMF. *Policies to Foster Green Foreign Direct Investment*. Washington, 2024.
3. World Bank. *Financing Green Growth: International Experience*. Washington, 2022.
4. UN Environment Programme. *Green Economy and Sustainable Development*. Nairobi, 2021.
5. Sodiqova, N., Jumayev, B., Djurayeva, M., Bobojonova, M., & Usmonov, F. (2025). Numerical Investigation and Thermal Performance Analysis of Smooth Absorber Tube in a Parabolic Trough Solar Collector. In *E3S Web of Conferences* (Vol. 661, p. 04006). EDP Sciences.
6. Bobojonova, M. (2025). MARKETING IN THE GREEN ECONOMY: STRATEGIES, TRENDS, AND IMPACTS. *International Journal of Artificial Intelligence*, *1*(4), 1401-1404.
7. Bobojonova, M. J. (2025). THE STATUS OF GREEN ENTREPRENEURSHIP IN THE REPUBLIC OF UZBEKISTAN AND ITS PROMISING DIRECTIONS. *PEDAGOGIK ISLOHOTLAR VA ULARNING YECHIMLARI*, *16*(01), 117-119.
8. Bahromjon, X., Nafisa, Z., Muhayyo, M., Shokhida, N., & Madina, B. (2025). Numerical Analysis of Flow Characteristics in a Penstock Using COMSOL Multiphysics. In *E3S Web of Conferences* (Vol. 648, p. 03017). EDP Sciences.
9. Bobojonova, M. J., & Jumayeva, Z. B. (2025). YASHIL IQTISODIYOTDA IQLIM O'ZGARISHI BILAN PAYDO BO'LADIGAN MUAMMOLARNI OLDINI OLISH MAQSADIDA JORIY QILINGAN ISTIQBOLLI YO'NALISHLAR. *ANALYSIS OF MODERN SCIENCE AND INNOVATION*, *1*(4), 108-113.
10. Bobojonova, M. J. (2025). GREEN ECONOMY AND ITS DEVELOPMENT STATUS. *SHOKH LIBRARY*.
11. Bobojonova, M. J., & Sodiqova, N. T. (2025). JAHON IQTISODIYOTDA YASHIL IQTISODIYOTNING O'SISHI VA GG-GE-SD MODELI. *MODERN EDUCATIONAL SYSTEM AND INNOVATIVE TEACHING SOLUTIONS*, *1*(6), 251-260.
12. Bobojonova, M. J., & Sodiqova, N. T. (2025). HOZIRGI KUNDA YASHIL DAVLAT XARIDLARI HOLATI VA UNING ISTIQBOLLI YO 'NALISHLARI. *THEORY OF SCIENTIFIC RESEARCHES OF WHOLE WORLDT*, *1*(4), 153-163.
13. Bobojonova, M. J., & Naimova, N. A. (2024). A NEW FORM OF OUTSORCING IN ENSURING SELF-EMPLOYMENT OF THE POPULATION.
14. Bobojonova, M. (2025). PRICES LEVELS IN THE GREEN ECONOMY AND THEIR APPLICATION. *Journal of Applied Science and Social Science, 1* (1), 109-117.

ISSN: 2692-515-x, Impact Factor: 9.23
American Academic publishers, volume 6, issue 01,2026
Journal: https://www.academicpublishers.org/journals/index.php/ijai

15. Bobojonova, M. J. (2025). PROMISING WAYS OF SUSTAINABLE TOURISM DEVELOPMENT IN THE POST-PANDEMIC PERIOD. *ANALYSIS OF MODERN SCIENCE AND INNOVATION, 1* (4), 284-291.
16. Bobojonova, M. J. (2025). STATE AND ANALYSIS OF NATURAL RESOURCE EFFICIENCY USE. *MODERN PROBLEMS IN EDUCATION AND THEIR SCIENTIFIC SOLUTIONS, 1* (4), 281-287.
17. Bobojonova, M. J. (2025). NATURAL RESOURCE POTENTIAL AND ITS ECONOMIC SIGNIFICANCE. *MODERN EDUCATIONAL SYSTEM AND INNOVATIVE TEACHING SOLUTIONS, 1* (5), 206-213.
18. Bobojonova, M. J. (2025). THE LEVEL OF NATURAL RESOURCE USE IN CENTRAL ASIA AND ITS STATE. *THEORY OF SCIENTIFIC RESEARCH OF WHOLE WORLDT, 1* (3), 180-187.
19. Bobojonova, M. (2025). THE ROLE AND PROMISING DIRECTIONS OF GREEN BONDS IN FINANCING THE GREEN ECONOMY IN THE GLOBAL FINANCIAL MARKET. *International Journal of Artificial Intelligence, 1* (2), 1067-1071.
20. Bobojonova, M. J. (2025). PRODUCTION AND ITS ROLE IN THE ECONOMY. *Modern Science and Research, 4* (3), 144-150.