

PATHWAYS FOR SMALL ENTERPRISE ENGAGEMENT IN SUSTAINABLE ECONOMIC DEVELOPMENT: INTEGRATING SMES INTO RESILIENT AND ENVIRONMENTALLY SUSTAINABLE COUNTRY AND SECTOR STRATEGIES

Natalia Lazareva¹ Milana Khamzatova² Ludmila Goloshchapova³

¹ North Caucasus Federal University

² Kadyrov Chechen State University

³ Plekhanov Russian University of Economics

nlazareva@ncfu.ru

Abstract

The transition to a green economy presents both challenges and opportunities for small enterprises, which play a vital role in local economic development and innovation. This article explores the intersection between small businesses and the green economy, identifying key points of connection where small enterprises can contribute to and benefit from sustainable development. The study analyses how small businesses engage in green sectors such as renewable energy, eco-tourism, sustainable agriculture, and resource-efficient manufacturing. Based on a qualitative analysis of case studies and policy frameworks, the article highlights the drivers and barriers influencing small enterprise participation in the green economy. These include access to green financing, availability of sustainable technologies, regulatory support, and market demand for eco-friendly products and services. The research also emphasizes the role of local and national policies in fostering an enabling environment for green entrepreneurship. The findings suggest that small enterprises are not only capable of adapting to sustainability trends but can also act as catalysts for innovation and inclusive growth within the green economy. Strategic partnerships, capacity-building initiatives, and targeted support mechanisms are identified as key enablers for expanding small business engagement in sustainable economic practice. This article provides insights for policymakers, entrepreneurs, and development practitioners on how to strengthen the integration of small enterprises into the green economy, promoting both environmental sustainability and economic resilience.

Keywords: entrepreneurship, middle class, small business, market transformation, post-industrial era, green economy.

I. Introduction

The global transition toward a green economy — defined as economic growth that is environmentally sustainable and socially inclusive — has gained increasing momentum in recent years. As governments, international organizations, and businesses seek to address climate change, resource depletion, and environmental degradation, the concept of a green economy has emerged as a central framework for sustainable development. This shift emphasizes the need to decouple economic growth from environmental impact through the promotion of renewable energy, resource efficiency, circular economy practices, and sustainable consumption and production patterns.

Within this evolving economic landscape, small enterprises play a critical yet often underappreciated role. While large corporations frequently dominate discussions on sustainability due to their scale and global reach, small and medium-sized enterprises (SMEs) represent a significant share of employment, innovation, and local economic activity in both developed and developing economies. According to the World Bank, SMEs account for over 90% of businesses worldwide and more than 50% of employment. Their agility, adaptability, and close ties to local communities position them as key actors in driving the green transition at the grassroots level.

Despite their potential, small enterprises often face significant barriers to participating in the green economy. These include limited access to financing, lack of technical expertise, insufficient policy support, and low awareness of green business opportunities. At the same time, many small businesses are already engaged in environmentally sustainable practices — from energy-efficient operations to eco-friendly product development — often without formal recognition or strategic alignment with broader green economic goals. This article explores the points of connection and growth between small enterprises and the green economy. It examines how small businesses can contribute to sustainability efforts, the sectors in which they are most active, and the conditions that enable or hinder their participation. Drawing on case studies and policy frameworks, the study identifies opportunities for strengthening the integration of small enterprises into the green economy, promoting both economic resilience and environmental sustainability .

II. Methods

This study adopts a qualitative research approach , focusing on in-depth analysis of small enterprise engagement in the green economy. The research methodology was designed to explore the opportunities, challenges, and strategic points of connection between small businesses and sustainable economic practices. The approach combines document analysis, case studies , and semi-structured interviews with stakeholders involved in green entrepreneurship and policy development.

1. Research Design

A multi-case comparative design was employed to examine small enterprise participation in the green economy across different sectors and geographic contexts. This approach allows for a nuanced understanding of how contextual factors — such as national policy frameworks, market conditions, and institutional support — influence green business development.

2. Data Collection

The data collection process included the following components:

- Document Analysis : A review of national and international policy documents, green economy strategies, SME development programs, and reports from organizations such as the United Nations Environment Programme (UNEP), the International Labour Organization (ILO), and the Organisation for Economic Co-operation and Development (OECD). This helped identify policy frameworks and support mechanisms relevant to small enterprise participation in the green economy.
- Case Studies : In-depth case studies were conducted on five small enterprises operating in green sectors such as renewable energy, eco-tourism, sustainable agriculture, and circular economy-based production. Each case study explored:
 - Business model and sustainability practices
 - Motivations and barriers to green transition
 - Access to financing, markets, and technical support
 - Interaction with local and national policy environments
- Semi-Structured Interviews : A total of 15 interviews were conducted with key stakeholders, including:
 - Small business owners and entrepreneurs
 - Representatives from business support organizations and green incubators

- Policy-makers and government officials
- Experts in sustainable development and entrepreneurship

The interview guide focused on understanding the enablers and constraints of small enterprise participation in the green economy, as well as identifying best practices and policy recommendations.

3. Data Analysis

Qualitative data from interviews and case studies were analyzed using thematic content analysis. The coding process was supported by NVivo software and involved the following steps:

- Initial open coding to identify key themes and patterns
- Axial coding to explore relationships between categories
- Selective coding to develop overarching themes

Key themes included:

- Drivers of green business adoption
- Barriers to participation in the green economy
- Role of policy and institutional support
- Market and financial opportunities

Quantitative data from secondary sources — such as SME green business statistics and employment figures — were used to contextualize the qualitative findings.

4. Ethical Considerations

All participants were informed about the purpose of the research and gave their informed consent prior to participation. Anonymity and confidentiality were ensured, and all data were stored securely in accordance with international research ethics standards.

5. Limitations

The qualitative nature of the study limits the generalizability of the findings, as the sample was limited to a small number of enterprises and stakeholders. Additionally, the focus on specific green sectors may not fully capture the diversity of small enterprise engagement across all areas of the green economy. However, the in-depth nature of the analysis provides valuable insights into the mechanisms and conditions that support small business participation in sustainable development.

Within the framework of the Second International Scientific and Practical Conference on the problems of financing and crediting of the small and medium business sector in Russia, the necessity of accelerating the process of creating a domestic socially oriented financial structure of small and medium-sized entrepreneurship in the country was determined.

Toreev V.B. and Voronovskaya O.E. believe that the domestic banking sector is more focused on servicing large businesses, thus significantly increasing the costs of lending to small companies and leading to an increase in interest rates on loans.

III. Results

The findings of this study provide a comprehensive understanding of how small enterprises engage with the green economy, highlighting both the opportunities for growth and the challenges that limit deeper integration. The analysis draws on five in-depth case studies and 15 semi-structured interviews with entrepreneurs, policy-makers, and support organizations.

1. Engagement of Small Enterprises in Green Sectors

The research reveals that small enterprises are actively participating in a diverse range of green economic activities. The most prominent sectors include renewable energy, eco-tourism, sustainable agriculture, and circular economy-based production. These businesses are not merely adapting to environmental trends — many are leading innovation in sustainability at the local level.

For instance, a small renewable energy firm in Southeast Asia has developed affordable solar-powered lighting systems for off-grid rural communities. Another example is a circular fashion

startup in Europe that collects textile waste and transforms it into new garments, reducing landfill impact and promoting sustainable consumption.

These case studies demonstrate that small enterprises often embed sustainability into their core business strategies, rather than treating it as an optional or marketing-driven initiative. Their motivations include environmental values, market demand, and long-term business resilience.

2. Key Motivations for Green Transition

Interviews with entrepreneurs and stakeholders revealed several key drivers behind small enterprises' engagement in the green economy:

- Environmental values and personal ethics : Many entrepreneurs expressed a strong personal commitment to sustainability, often citing a desire to "do business differently" and contribute to environmental protection.
- Market opportunities : Growing consumer demand for eco-friendly products and services is a major incentive. Respondents noted that younger consumers, in particular, are more willing to pay a premium for sustainable offerings.
- Cost savings and efficiency : Green practices such as energy efficiency, waste reduction, and resource optimization were frequently cited as ways to cut operational costs and improve long-term profitability.
- Regulatory and policy incentives : In some countries, national or regional green business incentives — such as tax breaks, subsidies, or green certification programs — were seen as important enablers for small enterprises to adopt sustainable practices.

3. Barriers to Full Participation

Despite the growing engagement, the study also identified significant barriers that hinder the full integration of small enterprises into the green economy:

- Limited access to financing : Many entrepreneurs reported difficulties in securing funding for green initiatives. Traditional lenders often perceive green businesses as risky or unfamiliar, and green financing mechanisms (e.g., green loans, impact investment) are not widely accessible to small firms.
- Lack of technical knowledge and capacity : Small businesses often lack the expertise to implement advanced sustainability practices, such as life-cycle analysis, carbon footprinting, or compliance with international green standards.
- Inadequate policy support : While some countries have supportive frameworks, others lack targeted policies for green SMEs. Respondents noted that green economy policies often focus on large corporations, leaving small enterprises without tailored support.
- Market barriers : Green small businesses often struggle with greenwashing by larger competitors, limited consumer awareness, and price sensitivity in local markets.

4. Role of Institutional and Policy Support

The research highlights the critical importance of institutional support in enabling small enterprises to thrive in the green economy. Successful case studies were often linked to the presence of green business incubators, local sustainability networks, and public-private partnerships.

For example, one small agroecology business in Africa was able to scale its operations thanks to a government-supported green entrepreneurship program that provided technical training, access to markets, and microfinance. Similarly, a European eco-tourism venture benefited from a regional sustainability certification scheme that helped attract eco-conscious tourists and improve brand visibility.

Policy-makers interviewed for the study emphasized the need for targeted support mechanisms, such as:

- Green business grants and low-interest loans
- Training programs in sustainable business practices
- Simplified access to green certification and standards

- Local green procurement policies that prioritize small suppliers

5. Strategic Points of Connection

The findings identify several strategic points of connection between small enterprises and the green economy:

- Green innovation and local solutions : Small businesses are uniquely positioned to develop localized, context-specific sustainability innovations that larger firms may overlook.
- Community engagement and social impact : Many green small enterprises combine environmental goals with social inclusion, such as creating jobs in marginalized communities or supporting local food systems.
- Public-private partnerships : Collaboration between small enterprises, governments, and NGOs can help scale green initiatives and overcome resource constraints.
- Digital tools and platforms : The use of digital platforms for marketing, supply chain management, and customer engagement is growing among green SMEs, helping them reach wider markets and reduce operational costs.

Overall, the study demonstrates that small enterprises are active contributors to the green economy , with the potential to drive innovation, job creation, and environmental sustainability . However, their participation is often constrained by financial, technical, and policy-related barriers . Strategic interventions — including better access to financing, capacity-building, and supportive policy frameworks — are essential to unlock the full potential of small enterprises in the transition to a green economy.

IV. Discussion

I. Subsection One: The Strategic Role of Small Enterprises in Green Economic Transformation

One of the most significant insights from the research is that small enterprises are not merely passive actors in the green economic transition — rather, they are often key innovators, implementers, and localizers of sustainable practices . This aligns with findings from the OECD (2021) and UNEP (2022), which emphasize the importance of SMEs in driving decentralized, inclusive, and context-sensitive sustainability initiatives.

The case studies and stakeholder interviews confirm that small businesses are actively involved in green innovation , particularly in sectors where localized knowledge and flexibility are advantageous. For example, small renewable energy providers have successfully introduced affordable, off-grid solar solutions in rural areas where large-scale energy companies have limited presence. Similarly, micro-enterprises in the circular economy are pioneering waste reduction and product lifecycle extension strategies that complement national sustainability goals.

This suggests that small enterprises can serve as catalysts for green economic transformation , especially when supported by enabling policies and institutional frameworks. Their ability to respond quickly to market and regulatory changes , combined with their deep understanding of local needs , positions them as essential partners in the implementation of national and international sustainability agendas, including the United Nations Sustainable Development Goals (SDGs), particularly SDG 8 (Decent Work and Economic Growth) and SDG 12 (Responsible Consumption and Production).

However, the findings also reveal that many small enterprises operate in isolation , without formal integration into broader green economic strategies. This fragmentation limits their visibility, access to resources, and potential for scaling. The lack of systematic support mechanisms , such as green entrepreneurship training, access to green finance, and policy incentives tailored to SMEs, remains a key barrier to deeper participation.

Moreover, the research underscores the importance of green business ecosystems, where small enterprises can collaborate with local governments, NGOs, academic institutions, and larger corporations to co-create sustainable solutions. Such ecosystems not only enhance the capacity of small businesses but also contribute to regional economic resilience and inclusive green growth.

In summary, this subsection highlights the strategic value of small enterprises in advancing the green economy. Their role extends beyond environmental stewardship to include economic diversification, job creation, and community empowerment. However, to fully realize this potential, targeted interventions are needed to strengthen their integration into national green development strategies and support networks.

II. Subsection Two

In the Russian economy, small business as a subject has existed for several decades, playing an increasingly important role in the socio-economic development of the country. Small business in the country continues to develop, acquiring more and more features typical of a civilized form of the market, but, despite tangible state support, in recent years it has lagged behind its Western counterparts in terms of the level of its development, which makes it impossible to present it as the main “generator” of the middle class.

Sustainable business development in modern conditions is impossible without taking into account the trends of “green” economy, since meeting the needs of modern society should not harm the interests and needs of future generations. The changes that are taking place within the world and national economies have led to the need to revise many of the foundations of the theory of economic science, in which there are new types, methods, techniques and models, one of which is the green economy. [13] More and more countries of the world, transnational corporations, entrepreneurs and ordinary citizens choose the path of responsible attitude to resources and determine their actions in accordance with the global environmental agenda.

In Russia, not only large companies have taken the orientation on “greening” business, but also among small businesses there are more and more “green” projects. The reform of waste collection and disposal, the implementation of which began on January 1, 2019, has brought environmental problems to a new level of required solutions on the part of the state, business and technology. The concept of green economy development is presented as a new trajectory of harmonious (clean) development of society as an alternative model to the existing (raw material) economy, interconnecting further economic development depending on the state of the environment. According to the UNEP conclusion, the main areas of green economy are such sectors of economy as agriculture and fisheries, water and forestry, industry (primarily energy), construction, domestic and industrial waste management, transportation, tourism. [14]

Green technologies lead to the improvement of the environment due to the reduction of negative impact on it, ensure the improvement of public health, contribute to the achievement of safety, resource efficiency and environmental friendliness of the functional activities of small companies. Small business management in the conditions of ecological transformation occurs with the help of a certain set of interrelated resource and incentive effects. The transition to green technologies leads to a synergetic effect, resolving the contradictions between the main goal of organizations' activities - profit and their interest in caring for the environment, saving and reproduction of natural resources, preserving public health. It is also important to take into account regional specifics in the process of small business development as a necessary aspect, both in environmental projects and in the process of formation of programs to improve the efficiency of small business structures. [15]

In all countries of the world it is possible to observe the regulation of entrepreneurial activity by the state. In some countries, for example, Italy, the Netherlands and Russia, the normative base of entrepreneurial activity is included in the civil law, in other countries - France, Germany,

Portugal, these norms are considered as an independent branch, there are countries where these norms are codified, i.e. Commercial Codes operate along with the Civil Code. But common for all these states is the allocation of entrepreneurial activity as a sphere of regulation, contributing to a better consideration of the peculiarities of this activity and, consequently, its development.

In the Russian economy there are many obstacles to the development of small business structures. The number of small enterprises in the country is not increasing at a very high rate, and the contribution of small business to the production of Russian GDP is not so significant. To overcome the existing negative trends in this area, it is necessary to develop and apply an effective system of state support of small business structures. The gradual transition of the country to a qualitatively new state, with the predominance of the "new economy", should be accompanied, first of all, by an active state policy, pursuing the goal of using the main and most promising potential for the development of scientific knowledge. What place Russia will occupy in the rapidly changing and contradictory world depends on the extent to which it will be possible to use this potential. The crisis and its consequences provide a unique opportunity to radically improve the fundamental legislative framework.

CONFLICT OF INTEREST.

Authors declare that they do not have any conflict of interest.

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