



This journal provides immediate open access to its content under the [Creative Commons BY 4.0 license](https://creativecommons.org/licenses/by/4.0/). Authors who publish with this journal retain all copyrights and agree to the terms of the above-mentioned CC BY 4.0 license

DOI: 10.2478/seeur-2026-0011

---

# INSTITUTIONAL SUPPORT FOR SUSTAINABLE PRACTICES IN ORGANIZATIONS IN NORTH MACEDONIA

---

Zharko Trajkov  
Triagolnik Center for Non-formal Education,  
Skopje; North Macedonia  
zarko.trajkov@gmail.com

## ABSTRACT

This paper provides a structured academic analysis of sustainable development, sustainable entrepreneurship, and the role of institutional support in fostering sustainable practices within organizations in North Macedonia. The study integrates conceptual insights with empirical evidence derived from a survey of 107 organizations across multiple sectors. It argues that sustainability should not be perceived as a peripheral or symbolic activity, but rather as a strategic framework that integrates economic performance, social responsibility, and environmental stewardship into core organizational decision-making.

The empirical findings demonstrate that institutional support plays a critical role in enabling the adoption and development of sustainable practices. Financial support mechanisms—such as grants, subsidies, and access to capital—are positively associated with improvements in environmental management systems, energy efficiency, and the measurement of social and environmental impact. However, the analysis reveals that non-financial support, including training, consultancy, and knowledge transfer, exhibits even stronger correlations with sustainability implementation. This suggests that organizational capability-building and access to expertise are essential for translating sustainability commitments into operational practices.

The study concludes that the advancement of sustainable organizational development in North Macedonia requires a coordinated and comprehensive institutional approach. This includes enhanced policy alignment, improved accessibility of financial instruments, strengthened advisory and educational support, and the establishment of clear standards and long-term strategic commitment to sustainability. The findings contribute to both academic literature and policy discourse by emphasizing that effective sustainability transitions depend on the interplay between organizational strategy and institutional capacity.

**Keywords:** Sustainable development, Organizational sustainability, Institutional support

## INTRODUCTION

### CONCEPTUAL FOUNDATIONS OF SUSTAINABLE DEVELOPMENT

Sustainable development has become one of the defining concepts of contemporary economic and social policy because it addresses a fundamental dilemma: how societies can continue to generate prosperity without undermining the ecological and social systems on which prosperity depends. In its classic formulation, sustainable development means meeting present needs without compromising the ability of future generations to meet their own needs. This definition retains analytical importance because it links intergenerational justice with the practical management of resources, institutions and growth models (World Commission on Environment and Development, 1987).

Over time, the concept has evolved from a primarily environmental concern into a broader governance and development framework. The 2030 Agenda emphasizes that poverty eradication, social inclusion, environmental protection and economic growth are interconnected and must be pursued together. In that sense, sustainable development is not simply an environmental add-on to economic policy; it is an integrated model of development in which the economic, social and environmental dimensions are treated as mutually dependent rather than separately optimized domains (United Nations General Assembly, 2015).

Recent global evidence reinforces the urgency of this integrated perspective. The Sustainable Development Goals Report 2024 shows that the world is severely off track, with only 17% of assessed targets currently on course for achievement by 2030. Stagnation, regression and uneven progress reveal that fragmented approaches are insufficient, especially in periods marked by climate shocks, conflict, inflationary pressure and widening inequality. The contemporary relevance of sustainability therefore lies not only in its moral appeal but also in its explanatory power for understanding systemic risk and long-term resilience (United Nations, 2024).

At the organizational level, sustainability can be understood as the capacity to achieve continuity, competitiveness and legitimacy while preserving the social and ecological conditions that support business activity. This broader perspective shifts attention away from short-term survival or one-dimensional profit indicators toward long-term value creation. In academic literature, sustainable entrepreneurship and organizational sustainability are increasingly associated with innovation, stakeholder engagement, social impact and environmental performance rather than with economic returns alone (Ali, 2021).

The sustainable development of organizations therefore implies more than compliance with regulation. It requires organizations to embed sustainability into mission, strategy, operations and performance assessment. In practice, this means rethinking how firms define success, how they allocate resources, how they interact with employees and communities, and how they manage environmental impacts. This strategic view is especially important in contexts where sustainability is still perceived as a cost burden instead of a source of innovation, legitimacy and competitive differentiation (Radu et al., 2023; United Nations General Assembly, 2015).

A useful way to interpret this shift is through the movement from narrow shareholder-centered evaluation toward broader stakeholder and impact-based frameworks. Many organizations have long focused on total shareholder return, yet current debate increasingly emphasizes total social impact and ESG-related performance. This transition reflects the

recognition that firms generate value and risk not only through financial outcomes but also through labor practices, community relations, carbon intensity, supply-chain choices and governance quality. As a result, organizational performance is being assessed through wider social and environmental lenses (Radu et al., 2023).

The triple relationship among economy, society and environment is especially significant for countries and organizations operating under conditions of limited resources. In such contexts, sustainable development becomes closely connected to efficiency, learning and institutional design. It requires better use of energy and materials, stronger accountability, and the capacity to transform knowledge into innovation. From this perspective, sustainability is not an obstacle to growth; rather, it is a framework for achieving growth that is more durable, legitimate and adaptive (World Commission on Environment and Development, 1987; OECD, 2024a).

Another important aspect of sustainability is its normative dimension. Sustainable development presupposes responsibility toward future generations, but it also demands fairness in the present. That includes concern for workers, customers, local communities and vulnerable groups affected by economic activity. Because of this, sustainability cannot be reduced to environmental management alone. It is equally concerned with human rights, social protection, inclusion and the institutional conditions that make participation and accountability possible (United Nations General Assembly, 2015). The contemporary sustainability debate also shows that governance quality matters. Organizations may adopt sustainability rhetoric without translating it into measurable practice. This creates a gap between symbolic commitment and operational reality. Closing that gap requires clear indicators, transparent reporting, managerial responsibility and access to credible information. In other words, sustainability becomes meaningful when organizations are able to identify material issues, measure their impacts and adjust decisions on the basis of evidence (Radu et al., 2023; United Nations, 2024).

For these reasons, the sustainable development of organizations should be treated as a long-term process of strategic adaptation and institutional learning. It requires economic rationality, environmental prudence and social responsibility to be integrated into a coherent model of action. The remainder of this paper develops that argument by connecting the theoretical foundations of sustainability to the empirical realities of organizations in North Macedonia, with particular attention to the role of institutional support in enabling sustainable practices (Ali, 2021; World Bank, 2024).

## **SUSTAINABLE ENTREPRENEURSHIP, ESG, AND ORGANIZATIONAL STRATEGY**

Sustainable entrepreneurship represents one of the most dynamic conceptual bridges between sustainability theory and business practice. It refers to entrepreneurial activity that seeks to create economic value while simultaneously contributing to environmental protection and social well-being. Rather than treating profit and responsibility as mutually exclusive, sustainable entrepreneurship treats them as potentially complementary, provided that firms innovate in their products, processes, governance and stakeholder relations (Ali, 2021).

The literature shows that sustainable entrepreneurship is a multidimensional construct. It includes concern for profitability and competitiveness, but it also includes resource efficiency, ethical commitment, health and well-being, job quality, environmental innovation and the social consequences of business decisions. Research trends further suggest that the field has moved from conceptual discussion toward more practical questions about implementation, assessment and institutional conditions for success. This shift makes the topic especially

relevant for economies where sustainability is still emerging as a managerial practice (Ali, 2021). From a managerial perspective, ESG frameworks have provided an operational language for this broader concept of business responsibility. Environmental criteria focus on resource use, emissions, waste and ecosystem impact. Social criteria emphasize labor standards, community relations, equality and human well-being. Governance criteria concern transparency, accountability, ethical decision-making and institutional integrity. When organizations integrate these dimensions into strategic planning, they move closer to a model in which long-term resilience and legitimacy complement financial performance (Radu et al., 2023).

Importantly, the connection between ESG performance and the Sustainable Development Goals is not abstract. Empirical work has shown that ESG indicators can be mapped onto SDG contributions, although the relative importance of environmental, social and governance pillars varies across industries. This means that organizations can translate global development goals into firm-level practices and reporting routines. For countries aspiring to strengthen competitiveness and align with European standards, such alignment is increasingly relevant for investment attractiveness, export readiness and policy credibility (Radu et al., 2023; United Nations General Assembly, 2015).

Stakeholder theory also helps explain why sustainability is increasingly central to business strategy. Employees, investors, customers, regulators, suppliers and communities all influence organizational legitimacy. Evidence from SMEs indicates that employees and broader non-contractual stakeholders can significantly stimulate the adoption of green innovation, while weak or poorly designed public administration may hinder it. This suggests that sustainable strategy is shaped not only by internal intention but also by the quality of the institutional and relational environment in which firms operate (Thomas et al., 2022).

In practical terms, organizations that pursue sustainability strategically are more likely to invest in impact measurement, energy efficiency, cleaner technologies, environmental management systems and stakeholder dialogue. They are also more likely to interpret sustainability as a source of differentiation rather than a compliance burden. By contrast, organizations that operate under severe financial pressure, limited managerial capacity or weak institutional incentives often postpone these investments and treat sustainability as secondary to everyday survival (OECD, 2024b; World Bank, 2024).

This tension is particularly visible in small and medium-sized enterprises. SMEs are often expected to innovate and adapt quickly, yet they face disproportionate barriers in financing, expertise, access to advisory services and regulatory navigation. That is why the study of sustainable entrepreneurship cannot be separated from the study of institutional support. The ability of firms to move from sustainability rhetoric to sustainability practice depends heavily on whether knowledge, incentives, regulation and financing are available in forms that firms can realistically use (Ullah et al., 2021; OECD, 2024a).

Consequently, the sustainable development of organizations should be understood as a strategic and institutional challenge at the same time. Strategy determines whether sustainability is integrated into goals and operations. Institutions determine whether firms have the capabilities, incentives and support structures necessary to act on those goals. This dual perspective is central to the empirical part of the present paper, which investigates how institutional support influences sustainable practices in organizations in North Macedonia (Thanasi-Boçe et al., 2023; World Bank, 2024).

## **SUSTAINABILITY AND SUSTAINABLE PRACTICES IN ORGANIZATIONS IN NORTH MACEDONIA**

North Macedonia has increasingly incorporated sustainability into its policy agenda, particularly through commitments related to the European Union accession process, green transition objectives, and circular economy reforms. However, despite growing policy attention, the implementation of sustainability practices at the organizational level remains uneven. The business sector is dominated by small and medium-sized enterprises (SMEs), many of which face resource constraints, limited managerial capacity, and difficulties accessing specialized sustainability-related expertise and financing (OECD, 2024a; World Bank, 2024).

The sustainability transition has become particularly relevant in the context of EU alignment. Recent European Commission assessments emphasize the need for stronger implementation of environmental legislation, improved governance mechanisms, enhanced energy efficiency, and increased institutional capacity to support the green transition. These requirements place additional pressure on organizations to adopt sustainability-oriented practices while simultaneously highlighting the importance of effective support mechanisms (European Commission, 2024).

Existing research suggests that sustainability adoption among organizations in North Macedonia remains constrained by both internal and external factors. Studies indicate limited awareness of green economy opportunities among SMEs, insufficient technical expertise, regulatory complexity, and restricted access to financial incentives (Hadzi Naumova-Mihajlovska & Petroska-Angelovska, 2023; Ademi, 2024). At the same time, organizations that perceive sustainability as strategically relevant demonstrate greater willingness to adopt environmental management practices, circular business models, and resource-efficiency measures.

International assessments similarly highlight the importance of institutional support. OECD analyses indicate that although financial instruments and green investment initiatives have expanded, many organizations continue to experience difficulties in accessing advisory services, technical assistance, and tailored sustainability programs (OECD, 2024a). The World Bank (2024) further notes that achieving climate and sustainability objectives will require stronger coordination between public institutions, financial mechanisms, and private-sector actors.

Consequently, sustainability in North Macedonia should be viewed not only as an environmental challenge but also as a governance and institutional capacity issue. The effectiveness of sustainability initiatives depends significantly on the ability of organizations to access knowledge, incentives, financing, and implementation support. This is particularly important in an economy where many firms operate under resource limitations and face competing short-term priorities.

Another contextual issue is the uneven distribution of sustainability capabilities across sectors. Manufacturing firms generally encounter more explicit environmental pressures because of energy consumption, waste generation and supply-chain expectations. Service organizations may have a lower direct environmental footprint, but they still face growing pressure related to governance, labor practices, digital transparency and responsible procurement. This means that sustainable development in North Macedonia should not be framed only as an industrial or environmental issue, but as an economy-wide organizational challenge requiring differentiated support instruments and sector-sensitive guidance (Radu et al., 2023; OECD, 2024b). Against this background, the analysis of sustainable practices in

Macedonian organizations is especially important. It helps identify whether firms are integrating sustainability into decision-making, how they manage environmental impacts, what barriers they face, and to what extent institutional support changes outcomes. In contexts where the sustainability transition is still uneven, empirical evidence of this kind is essential for designing policies that are realistic, targeted and developmentally relevant (Thanasi-Boçe et al., 2023; OECD, 2024b).

Although previous studies have examined sustainability awareness among SMEs (Hadzi Naumova-Mihajlovska & Petroska-Angelovska, 2023) and the drivers and barriers of circular business models (Ademi, 2024), empirical evidence on the specific role of institutional support mechanisms remains limited. Existing research has primarily focused on awareness, barriers, and adoption drivers, while providing little quantitative evidence regarding the comparative influence of financial and non-financial support on sustainability practices. Furthermore, limited attention has been given to how institutional support simultaneously affects environmental management systems, energy-efficiency measures, and social and environmental impact assessment practices.

This study addresses this gap by examining the relationship between institutional support and organizational sustainability practices in North Macedonia, with particular emphasis on the relative contribution of financial and non-financial support mechanisms across multiple dimensions of sustainability implementation.

## **RESEARCH PROBLEM, OBJECTIVES AND HYPOTHESES**

The central research problem addressed in this paper is the weak and uneven implementation of sustainable practices in organizations in North Macedonia despite the growing strategic importance of sustainability. Although organizations increasingly operate under environmental, social and governance pressures, many still approach sustainability selectively, inconsistently or only symbolically. This creates a gap between the contemporary sustainability agenda and the actual operational routines of organizations. The question is therefore not only whether sustainability matters, but under what institutional conditions organizations are able to implement it meaningfully (United Nations, 2024; OECD, 2024b).

The paper starts from the premise that sustainability is no longer optional. The interdependence of environmental, social and economic systems means that business success in the future will depend on the ability of organizations to use resources responsibly, protect human well-being, adapt to changing policy frameworks and build trust with stakeholders. Yet these transformations require time, knowledge, incentives and financial capacity, all of which are often scarce in organizations operating under resource constraints (World Commission on Environment and Development, 1987; United Nations General Assembly, 2015).

The study is particularly concerned with institutional support because organizations rarely implement sustainable practices in isolation. Although previous studies have examined sustainability-related issues in North Macedonia, including green economy adoption among SMEs (Hadzi Naumova-Mihajlovska & Petroska-Angelovska, 2023) and barriers to circular business models (Ademi, 2024), empirical evidence regarding the relationship between institutional support mechanisms and organizational sustainability practices remains limited. Existing studies identify sustainability challenges and opportunities but do not distinguish between financial and non-financial support mechanisms or assess their relative contribution to specific sustainability practices. This study addresses that gap by examining how different forms of institutional support are associated with impact measurement, energy efficiency and environmental management systems in organizations operating in North Macedonia.

New reporting demands, cleaner technologies, environmental monitoring systems, training programs and energy-efficiency investments all depend on broader enabling structures. Such structures may include direct financial assistance, subsidies, grants, favorable lending, consultancy services, technical advice, educational programs and policy coordination. When these are absent or fragmented, organizations are more likely to postpone sustainability investments or limit them to superficial actions (OECD, 2024a; World Bank, 2024).

Accordingly, the first objective of the study is to examine the extent to which institutional factors influence the development of sustainable practices in organizations in North Macedonia. The second objective is to identify which forms of support matter most, and whether financial and non-financial support differ in their relationship with practice adoption. The third objective is to assess these relationships across specific areas of sustainability, including impact measurement, energy efficiency and environmental management. These objectives make it possible to move from general discussion to targeted explanation (Ali, 2021; Ullah et al., 2021).

The study therefore formulates a general hypothesis: institutional support is important for the development of sustainable practices in organizations. This is then operationalized through two sub-hypotheses. Hypothesis 1a states that financial support has a positive effect on sustainable practices in organizations. Hypothesis 1b states that non-financial support has a positive effect on sustainable practices in organizations. The distinction is analytically important because firms may need capital for investments, but they may need knowledge, consultancy and organizational guidance even more in order to implement sustainability effectively (Ullah et al., 2021; Mady et al., 2022).

These hypotheses reflect a wider theoretical expectation found in recent sustainability research: organizational action is shaped by both material resources and institutional capabilities. If the hypotheses are supported, the results would indicate that sustainability policy in North Macedonia should not focus only on regulation or awareness-raising, but also on building concrete financial and advisory mechanisms that help firms convert strategic intent into measurable practice (Thomas et al., 2022; OECD, 2024a).

## RESEARCH METHODOLOGY

The empirical part of the paper is based on a survey design oriented toward identifying the current level of sustainable practice adoption and the relationship between institutional support and selected sustainability indicators. A descriptive research design was used because the study sought not only to test relationships but also to document the condition of organizations in relation to management practices, environmental efficiency and the use of support mechanisms. This approach is appropriate in settings where the topic is still relatively new and baseline evidence is limited (Ali, 2021).

The questionnaire drew on criteria associated with the B Impact Assessment framework used by certified B corporations. This choice is methodologically valuable because the B-corporation framework evaluates organizations across employees, community, customers, governance and environment, thereby aligning with the multidimensional logic of sustainability. However, the framework was adapted to local conditions in North Macedonia, taking into account the country's stage of development, business realities and the need to identify realistic rather than idealized organizational practices (Thanasi-Boçe et al., 2023).

To provide greater transparency regarding the operationalization of the study variables, Table 1 presents the main constructs included in the questionnaire, representative survey items,

and the measurement scale used. The constructs were derived from the B Impact Assessment framework and adapted to the context of organizations operating in North Macedonia.

Table 1. Constructs, Representative Survey Items and Measurement Scale

| Construct                                 | Representative Survey Items                                               | Measurement Scale    |
|-------------------------------------------|---------------------------------------------------------------------------|----------------------|
| Financial Support                         | Grants, subsidies, government funds, loans and investment support         | 5-point Likert (1–5) |
| Non-financial Support                     | Training, consultancy, mentoring and advisory services                    | 5-point Likert (1–5) |
| Social & Environmental Impact Measurement | Impact measurement, stakeholder assessment and sustainability monitoring  | 5-point Likert (1–5) |
| Energy Efficiency                         | Energy monitoring, renewable energy use and resource efficiency practices | 5-point Likert (1–5) |
| Environmental Management Systems (EMS)    | Environmental policies, objectives, audits and performance monitoring     | 5-point Likert (1–5) |

All survey items were measured using five-point Likert scales ranging from 1 (strongly disagree/not implemented) to 5 (strongly agree/fully implemented). Composite scores for each construct were calculated by averaging the corresponding item responses and were subsequently used in the correlation and regression analyses.

A total of 210 organizations and institutions were contacted. Of the 210 organizations contacted, 107 completed questionnaires were received, resulting in a response rate of 50.95%, which is considered satisfactory for organizational survey and provides an adequate basis for exploratory statistical analysis.

Before distributing the questionnaire, personal contact was established with potential respondents in order to clarify the complexity of the questions and to explain the significance of the research. This preliminary step was particularly important because sustainable development remains a relatively new and sometimes conceptually unclear topic in the national context. The design therefore attempted to improve response quality by supporting understanding without directing responses (Hadzi Naumova-Mihajlovska & Petroska–Angelovska, 2023).

The sample included organizations from several sectors. Service organizations accounted for the largest share of responses, followed by manufacturing, trade and construction. By size, around half of respondents came from small organizations with 10 to 49 employees, approximately one third from medium-sized organizations with 50 to 249 employees, and a smaller share from large organizations with more than 250 employees. This composition is significant because it reflects the dominance of smaller firms in the national economy, while still allowing comparison across firm sizes. The sample also made it possible to compare manufacturing and non-manufacturing organizations, as well as organizations with domestic and foreign capital. These distinctions are analytically useful because sustainability demands, stakeholder pressure and access to support often vary along those lines (OECD, 2024b).

The study examined several categories of variables. The institutional support side included financial support and non-financial support. Financial support covered mechanisms such as grants, government funds, subsidies, lending, capital investment and related instruments. Non-financial support referred to consultancy, training, expertise and other knowledge-based mechanisms that can assist organizations in implementing sustainable practices. The sustainable-practice side included measurement and management of social and environmental impact, energy efficiency in buildings and facilities, and environmental

management systems. These dimensions were selected because they represent concrete manifestations of sustainability across strategy, operations and environmental control. They also correspond to areas frequently discussed in recent work on green innovation, ESG and circular transition (Thomas et al., 2022; Mady et al., 2022).

For statistical analysis, the paper combined descriptive techniques with Pearson's linear correlation coefficient. Descriptive analysis was used to assess the distribution of responses and identify dominant patterns in the data. Pearson correlation was then used to assess the strength and direction of relationships between the use of support mechanisms and the implementation of selected sustainable practices. The method is suitable because it allows the study to determine whether organizations using more support also tend to report higher levels of sustainability-related activity. Preliminary analysis indicated that the relationships were linear and that no significant outliers distorted the results, allowing Pearson's coefficient to be used despite some deviations from normal distribution (Ullah et al., 2021). The analytical logic of the methodology is straightforward. If financial or non-financial support is positively correlated with sustainable practices, then the study can reasonably argue that institutional support is associated with stronger implementation capacity. This does not eliminate the need for further causal research, but it does provide evidence strong enough to inform policy discussion. Given the still-developing sustainability ecosystem in North Macedonia, this type of applied empirical analysis is especially relevant because it can identify where intervention is most needed and what kind of support is likely to generate the greatest practical effect (OECD, 2024a; World Bank, 2024).

Prior to conducting Pearson correlation analysis, normality diagnostics were examined using skewness and kurtosis statistics. Although several variables exhibited minor deviations from perfect normality, all values remained within acceptable thresholds for Pearson correlation analysis in social science research. To verify robustness, Spearman's rho coefficients were additionally examined and produced substantively similar results, confirming the stability of the reported relationships.

At the same time, the methodology recognizes that sustainability implementation is shaped by context. Company size, sector and capital origin may influence both exposure to sustainability pressures and the ability to respond to them. For that reason, the study interprets correlation findings together with descriptive differences across manufacturing versus non-manufacturing organizations, small versus medium and large firms, and domestic versus foreign capital. This layered reading strengthens interpretation by situating the statistical results within the structural realities of the organizations studied (Thanasi-Boçe et al., 2023; OECD, 2024b).

## **ANALYSIS OF THE RESEARCH RESULTS**

The first set of findings concerns the general orientation of organizations toward creating positive social and environmental impact. Among the 107 surveyed organizations, 38.8% reported that they continuously include social and environmental impacts in decision-making because they consider them important for business success and profitability. An additional 24.5% stated that social and environmental impact is treated as a primary measure of business success, even when that may not lead directly to profitability. Taken together, these results suggest that 63.3% of surveyed organizations display a relatively responsible orientation toward impact creation. At the same time, a non-negligible share of organizations reported that positive social or environmental impact is not central to their business focus, showing that sustainability commitment remains uneven rather than universal (United Nations General Assembly, 2015; Radu et al., 2023).

This pattern can be interpreted in several ways. On the one hand, increased public scrutiny, investor pressure, employee expectations and the reputational value of social responsibility may all encourage firms to signal stronger commitment to sustainability. On the other hand, self-reported commitment should not be equated automatically with implementation depth. In emerging sustainability contexts, organizations may affirm broad principles while lacking the systems, metrics and capabilities required for consistent action. The rest of the findings therefore matter because they show whether this declared orientation is matched by concrete sustainable practices (Thomas et al., 2022; OECD, 2024b).

Environmental efficiency in facilities emerged as an important but still moderate area of implementation. The largest share of respondents indicated a significant degree of use of energy-saving methods such as energy monitoring, efficient appliances and lighting, or renewable energy. Yet high-intensity implementation remained much less common. Similar patterns appeared with water-efficiency systems, air-quality monitoring and the use of energy-efficient or reusable materials. Overall, these findings indicate partial movement toward environmental efficiency, but not yet strong or comprehensive institutionalization across the sample (World Bank, 2024; OECD, 2024a).

This moderate implementation level is important because facility efficiency is one of the most visible intersections of sustainability and economic rationality. Energy monitoring, efficient building materials and renewable energy often generate measurable savings, yet many organizations still appear to treat these measures cautiously. The weaker adoption of water-efficiency and air-quality management suggests that firms tend to invest first in practices whose financial benefits are easiest to perceive. This supports the argument that sustainability adoption is influenced by the perceived relationship between cost, benefit and managerial complexity (United Nations, 2024; World Bank, 2024).

The descriptive findings also reveal important contextual constraints. Many organizations reported limited time and resources for development, and development itself is often subordinated to daily operational demands. Other challenges include involving employees in organizational change, translating strategic plans into action, dealing with confusing sustainability indicators and moving beyond the traditional survival-through-profit paradigm. These barriers are highly consistent with what the literature describes as the capability problem of sustainability: organizations may accept the need for change while lacking the resources, knowledge and internal coordination needed to realize it (Ali, 2021; OECD, 2024b).

The results further suggest that institutional support is perceived as especially important under such conditions. Respondents emphasized the relevance of support for overcoming fear, uncertainty and the apparent contradiction between immediate profitability and sustainability-related investment. This is an important insight because sustainability transitions often generate cognitive and strategic tension inside organizations. When external support helps reduce uncertainty or compensates for costs, organizations may be more willing to experiment, invest and institutionalize new practices (OECD, 2024a; World Bank, 2024).

The correlation analysis provides the strongest empirical support for this interpretation. The relationship between the use of financial support and the measurement and management of social and environmental impact was positive, moderate and statistically significant, with  $r = .386$ ,  $n = 105$ ,  $p < .001$ . This indicates that organizations that make greater use of financial support tend to be more active in identifying, measuring and managing relevant social and environmental issues. The finding is important because impact measurement is one of the most

demanding sustainability practices; it requires data, procedures, managerial attention and sometimes specialized tools or advisory services (Radu et al., 2023; Ullah et al., 2021).

Table 2 Correlation between the factors of financial support utilization and social and environmental impact measurement and management

| MEASURING AND MANAGING<br>SOCIAL IMPACT |                     |         |
|-----------------------------------------|---------------------|---------|
| FINANCIAL SUPPORT                       | Pearson Correlation | .386 ** |
|                                         | Sig . (2-tailed)    | .000    |
|                                         | N                   | 105     |

The descriptive comparison within this result is also revealing. Manufacturing organizations reported a higher mean value for impact measurement and management than non-manufacturing organizations, suggesting that firms with more complex stakeholder exposure and more visible operational impacts are more likely to invest in these systems. Medium and large organizations also showed somewhat higher values than small organizations, which is consistent with the expectation that larger firms face stronger pressure and possess more capacity for monitoring and reporting. Organizations with predominantly foreign capital likewise displayed higher engagement than those with domestic capital, indicating the relevance of international standards, investor expectations and cross-border governance routines (Radu et al., 2023; OECD, 2024b).

Financial support was also positively related to the environmental efficiency of facilities. The reported correlation between financial support and building/facility energy efficiency was statistically significant and moderate,  $r(103) = .39$ ,  $p < .001$ . This suggests that organizations with more access to grants, subsidies, loans or similar financial mechanisms are better positioned to implement efficiency practices in their offices and production spaces. Such practices often require upfront investment, even when they create longer-term savings, so the link between support and implementation is theoretically plausible and empirically confirmed in the study (World Bank, 2024; OECD, 2024a).

Table 3 Correlation between the factors of use of financial support and energy efficiency of buildings

| ENERGY EFFICIENCY |                     |         |
|-------------------|---------------------|---------|
| FINANCIAL SUPPORT | Pearson Correlation | .395 ** |
|                   | Sig . (2-tailed)    | .000    |
|                   | N                   | 105     |

Here too, manufacturing organizations outperformed non-manufacturing organizations, and organizations with foreign capital reported higher average values than those with domestic capital. These patterns likely reflect differences in operating intensity, exposure to global standards and the direct financial consequences of energy use. Manufacturing firms have stronger incentives to reduce energy-related costs and environmental risk because resource-

intensive operations make inefficiencies more visible and more expensive. Foreign-capital firms may also face stronger headquarters requirements or market expectations regarding energy performance and environmental management (OECD, 2024b; World Bank, 2024).

The third major area examined was environmental management systems. The correlation between use of financial support and environmental management systems was also positive, moderate and statistically significant,  $r(103) = .492$ ,  $p < .001$ . This is especially relevant because environmental management systems involve more than isolated investments; they require monitoring, procedural alignment, managerial discipline and ongoing review. A positive relationship with financial support therefore indicates that institutional finance may help organizations develop more systematic environmental governance rather than only isolated efficiency measures (Mady et al., 2022; World Bank, 2024).

Table 4 Correlation between factors of financial support utilization and environmental management systems

| ENVIRONMENTAL MANAGEMENT |                             |
|--------------------------|-----------------------------|
| FINANCIAL SUPPORT        | Pearson Correlation .492 ** |
|                          | Sig . (2-tailed) .000       |
|                          | N 105                       |

Again, manufacturing organizations, medium and large organizations, and organizations with foreign capital reported higher mean values for environmental management systems. The interpretation is consistent with broader sustainability theory: where resource use, emissions, supply-chain pressures and reputational exposure are more intense, organizations are more likely to adopt structured systems such as EMS and to use standards like ISO 14001. These results show that sustainability practices are not distributed evenly across the organizational landscape, and that institutional support interacts with structural characteristics such as sector, size and ownership profile (OECD, 2024b; Thomas et al., 2022).

Non-financial support produced even stronger correlations than financial support. The relationship between non-financial support and the measurement and management of social and environmental impact was high, positive and statistically significant,  $r = .566$ ,  $n = 105$ ,  $p < .001$ . This suggests that consultancy, training, expertise and other forms of knowledge-based assistance are particularly important for the implementation of sophisticated sustainability practices. Measuring total impact requires conceptual clarity, data management, indicator selection and interpretive ability. It is therefore unsurprising that knowledge support is strongly associated with higher implementation levels (Ali, 2021; Radu et al., 2023).

Table 5 Correlation between the factors of use of non-financial support and measurement and management of social and environmental impact

**MEASURING AND MANAGING  
SOCIAL AND ENVIRONMENTAL IMPACT**

|                              |                     |         |
|------------------------------|---------------------|---------|
| <b>NON-FINANCIAL SUPPORT</b> | Pearson Correlation | .566 ** |
|                              | Sig . (2-tailed)    | .000    |
|                              | N                   | 105     |

An even stronger correlation appeared between non-financial support and the energy efficiency of buildings and facilities,  $r(103) = .617$ ,  $p < .001$ . This result underlines that energy efficiency is not only a financing question. Organizations also need technical understanding, planning ability, supplier information and managerial guidance in order to identify appropriate interventions and implement them effectively. In other words, even where some capital exists, organizations may fail to act without non-financial support that reduces informational barriers and implementation uncertainty (OECD, 2024a; World Bank, 2024).

Table 6 Correlation between the factors of use of non-financial support and energy efficiency of buildings.

**ENERGY EFFICIENCY**

|                              |                     |         |
|------------------------------|---------------------|---------|
| <b>NON-FINANCIAL SUPPORT</b> | Pearson Correlation | .617 ** |
|                              | Sig . (2-tailed)    | .000    |
|                              | N                   | 105     |

The relationship between non-financial support and environmental management systems was likewise high, positive and statistically significant,  $r(103) = .544$ ,  $p < .001$ . Environmental management systems require procedural knowledge, employee training, monitoring routines and the ability to coordinate multiple parts of the organization. The strong correlation therefore indicates that organizational learning and advisory support are not peripheral to sustainability; they are central mechanisms through which sustainability becomes operationally embedded. This finding is one of the clearest empirical contributions of the paper (Mady et al., 2022; OECD, 2024a).

Table 7 Correlation between factors of use of non-financial support and environmental management systems

**ENVIRONMENTAL MANAGEMENT**

|                              |                     |         |
|------------------------------|---------------------|---------|
| <b>NON-FINANCIAL SUPPORT</b> | Pearson Correlation | .544 ** |
|                              | Sig . (2-tailed)    | .000    |
|                              | N                   | 105     |

Descriptive comparisons on non-financial support align with this interpretation. Manufacturing organizations reported greater use of non-financial support than non-manufacturing organizations. Medium and large organizations also used such support more than small organizations. Organizations with foreign capital showed the highest levels of non-financial support utilization. Together, these patterns indicate that firms which are more exposed to competition, stakeholder expectations and technological complexity are also more likely to seek and use knowledge-based support. This further suggests that support utilization itself may be part of a broader strategic orientation toward modernization and sustainable development (Thanasi-Boçe et al., 2023; OECD, 2024b).

Table 8 Spearman's rho Correlation Analysis

| <b>Sustainability Practice</b>            | <b>Financial Support (<math>\rho</math>)</b> | <b>p-value</b> | <b>Non-financial Support (<math>\rho</math>)</b> | <b>p-value</b> |
|-------------------------------------------|----------------------------------------------|----------------|--------------------------------------------------|----------------|
| Social & Environmental Impact Measurement | <b>0.211</b>                                 | 0.034          | <b>0.495</b>                                     | <0.001         |
| Energy Efficiency                         | <b>0.426</b>                                 | <0.001         | <b>0.589</b>                                     | <0.001         |
| Environmental Management Systems          | <b>0.498</b>                                 | <0.001         | <b>0.592</b>                                     | <0.001         |

To assess the robustness of the Pearson correlation results, Spearman's rho coefficients were additionally calculated. The Spearman analysis produced results consistent with the Pearson correlations, confirming the direction and statistical significance of the observed relationships. In all examined sustainability dimensions, non-financial support demonstrated stronger associations than financial support. These findings indicate that the conclusions of the study are robust to potential deviations from normality and are not dependent on the specific correlation coefficient employed.

Table 9 Summary of Correlation Coefficients

| <b>Sustainability Practice</b>            | <b>Financial Support (r)</b> | <b>Non-financial Support (r)</b> |
|-------------------------------------------|------------------------------|----------------------------------|
| Social & Environmental Impact Measurement | 0.386                        | 0.566                            |
| Energy Efficiency                         | 0.395                        | 0.617                            |
| Environmental Management Systems          | 0.492                        | 0.544                            |

Table 9 clearly demonstrates that non-financial support exhibits stronger correlations with all three sustainability dimensions than financial support. This finding suggests that organizational knowledge, advisory assistance, training, and capability-building may be more influential than financial resources alone in promoting sustainability implementation.

To provide additional insight into organizational differences, descriptive statistics were calculated across sector, organizational size and ownership structure. The results are presented in Tables 10–12.

Table 10 Sustainability Practices by Sector

| Sustainability Dimension                  | Manufacturing | Non-Manufacturing |
|-------------------------------------------|---------------|-------------------|
| Social & Environmental Impact Measurement | 3.63          | 2.92              |
| Energy Efficiency                         | 3.46          | 2.64              |
| Environmental Management Systems          | 3.29          | 2.48              |

Manufacturing organizations consistently demonstrate higher sustainability implementation across all dimensions.

Table 11 Sustainability Practices by Organizational Size

| Sustainability Dimension         | Small (10–49) | Medium (50–249) | Large (250+) |
|----------------------------------|---------------|-----------------|--------------|
| Social & Environmental Impact    | 3.02          | 3.1             | 3.54         |
| Energy Efficiency                | 2.61          | 2.86            | 3.4          |
| Environmental Management Systems | 2.56          | 2.71            | 3.26         |

There is a clear positive relationship between organizational size and sustainability implementation.

Table 12 Sustainability Practices by Capital Ownership

| Sustainability Dimension                  | Domestic Capital | Foreign Capital |
|-------------------------------------------|------------------|-----------------|
| Social & Environmental Impact Measurement | 3                | 3.63            |
| Energy Efficiency                         | 2.76             | 3.27            |
| Environmental Management Systems          | 2.72             | 2.73            |

Organizations with foreign capital show higher sustainability adoption, especially in impact measurement and energy efficiency.

To assess the relative contribution of financial and non-financial support when considered simultaneously, multiple regression analysis was conducted. The results are presented in Table 13.

Table 13 Multiple Regression Analysis

| Dependent Variable                        | Predictor             | B      | p      |
|-------------------------------------------|-----------------------|--------|--------|
| Social & Environmental Impact Measurement | Financial Support     | -0.177 | 0.204  |
|                                           | Non-financial Support | 0.645  | <0.001 |
| Environmental Management Systems          | Financial Support     | 0.586  | 0.001  |
|                                           | Non-financial Support | 0.355  | 0.004  |

To further examine the relative contribution of institutional support mechanisms, multiple regression analysis was conducted. The results indicate that non-financial support is the strongest predictor of social and environmental impact measurement and management ( $B = 0.645$ ,  $p < .001$ ), while financial support does not remain statistically significant when both

forms of support are entered simultaneously into the model. For environmental management systems, both financial support ( $B = 0.586$ ,  $p = .001$ ) and non-financial support ( $B = 0.355$ ,  $p = .004$ ) remain significant predictors. These findings reinforce the central conclusion of the study that capability-building mechanisms such as training, consultancy, mentoring and advisory services play a particularly important role in sustainability implementation within organizations in North Macedonia.

A particularly interesting result is the apparent contradiction between the perceived importance of financial support and the relatively limited use of available financial mechanisms. Respondents largely agreed that financial support is important for sustainability, yet many organizations reported that they had not used, or had only minimally used, grants, government funds, subsidies, bank lending or related instruments. This mismatch is analytically significant because it points to an implementation gap between policy availability and practical accessibility. Support may exist formally but still fail to influence behavior if firms perceive procedures as complex, incentives as insufficient, or access conditions as unrealistic (OECD, 2024a; World Bank, 2024).

By contrast, non-financial support appeared to be used somewhat more often than financial support, despite the strong rhetorical emphasis placed on finance. This is consistent with the finding that non-financial support has stronger correlations with the examined sustainability practices. In environments where sustainability is still conceptually emerging, organizations may first need help understanding what to do, how to measure it and how to organize implementation before they can make effective use of larger-scale financing instruments. The results therefore imply that knowledge support is not secondary to financial support but may, in practice, be the more immediately catalytic mechanism (Ali, 2021; Ullah et al., 2021).

Taken together, the empirical findings confirm both operational hypotheses and the overarching hypothesis of the study. Financial support has a positive relationship with sustainable practices, confirming Hypothesis 1a. Non-financial support also has a positive relationship, and in several cases a stronger one, confirming Hypothesis 1b. Consequently, the general proposition that institutional support is important for the development of sustainable practices in organizations in North Macedonia is supported. The evidence shows not only that institutional support matters, but also that the type and usability of support matter significantly for implementation outcomes (OECD, 2024a; World Bank, 2024).

## **DISCUSSION, CONCLUSION AND RECOMMENDATIONS**

The findings of the study confirm that sustainable practices in North Macedonian organizations are developing, but unevenly and under significant constraints. Sustainability is recognized by many organizations as relevant, yet implementation remains partial, especially when it requires systematic measurement, formal environmental management or more demanding facility upgrades. This gap between recognition and execution is typical of sustainability transitions in contexts where firms face intense daily operational pressures and where institutional ecosystems are still evolving (Hadzi Naumova-Mihajlovska & Petroska-Angelovska, 2023; OECD, 2024b).

The most important empirical finding of this study is that non-financial institutional support demonstrates consistently stronger relationships with sustainability practices than financial support. Across all three examined sustainability dimensions—social and environmental impact measurement, energy efficiency, and environmental management systems—training, consultancy, knowledge transfer, and advisory support showed higher

correlation coefficients than grants, subsidies, loans, and other financial mechanisms. This finding suggests that sustainability challenges in North Macedonia are not solely resource-related but are equally, if not more strongly, associated with organizational capabilities, knowledge, and implementation capacity.

A major contribution of the study is its demonstration that institutional support is not merely a background condition but an active determinant of implementation. Financial support helps organizations manage the upfront costs of investment and adaptation. Non-financial support helps them interpret sustainability requirements, build internal capabilities, organize data and turn general commitment into concrete routines. The stronger correlations associated with non-financial support imply that knowledge, guidance and institutional learning are especially important in the early and middle stages of sustainability adoption (Ali, 2021; Mady et al., 2022).

These findings also have theoretical implications. They suggest that sustainability in organizations should be understood as a capability-building process rather than only a compliance process. Organizations do not become sustainable simply because expectations rise or regulations exist. They become more sustainable when they develop the capacity to measure impact, reorganize decision processes, learn new procedures and invest in technologies and standards. Capability, in turn, depends on both internal commitment and external institutional support. This explains why organizations with stronger stakeholder exposure or international connections tend to be more advanced in sustainability practice (Thomas et al., 2022; Radu et al., 2023).

The results further highlight that organizational heterogeneity matters. Manufacturing organizations, medium and large organizations, and organizations with foreign capital generally report stronger sustainability implementation. These groups are likely to face greater resource intensity, closer stakeholder scrutiny and stronger supply-chain or investor expectations. Smaller and domestically oriented organizations may therefore require more targeted policy support, simplified instruments and tailored advisory services if sustainability is to diffuse more broadly across the economy. Without such targeting, sustainability policy may deepen gaps between more and less capable firms (OECD, 2024b; OECD, 2024a).

From a policy perspective, the study supports a holistic approach to institutional support. Financial programs alone are insufficient if firms cannot navigate application procedures, assess technology options or build the internal systems required for implementation. Conversely, advisory programs alone may be insufficient if organizations cannot finance energy upgrades, reporting systems or environmental investments. Effective sustainability policy should therefore combine grants, subsidies, green credit and tax incentives with consultancy, training, technical assistance and standard-setting support (Ullah et al., 2021; World Bank, 2024).

The evidence also points to the importance of strategic policy coherence. OECD and World Bank assessments of North Macedonia note that green transition efforts are advancing, but that implementation gaps, limited access to sustainable finance and the continued presence of inconsistent incentives remain obstacles. For organizations, policy incoherence increases uncertainty and weakens the investment signal. Clearer long-term commitments, better coordination across ministries and stronger links between climate, industrial and SME policy would make institutional support more credible and more effective (OECD, 2024a; World Bank, 2024).

Education and awareness-building should also be treated as structural policy priorities. If sustainability indicators remain confusing and the concept itself remains weakly understood

among many organizations, then progress will remain slow regardless of formal commitments. Embedding sustainability in educational curricula, vocational training and managerial development can help build the social and cognitive infrastructure needed for long-term change. This recommendation is consistent with the broader argument of the paper that sustainability depends not only on resources, but also on knowledge and value orientation (United Nations General Assembly, 2015; Thanasi-Boçe et al., 2023).

At the organizational level, managers should treat sustainability as a strategic management issue rather than a peripheral reporting issue. Practical priorities include defining material social and environmental impacts, setting measurable goals, creating responsibility structures, engaging employees, improving energy and resource efficiency, and developing monitoring systems that support continuous improvement. Organizations that approach sustainability incrementally but systematically are more likely to achieve both efficiency gains and reputational benefits than those that rely on symbolic statements without operational follow-through (Radu et al., 2023; Thomas et al., 2022).

The broader conclusion of the paper is that sustainability can become a source of competitive advantage, but only when the necessary institutional conditions are present. In North Macedonia, the transition is underway but far from complete. Organizations show willingness, but willingness alone does not ensure implementation. The study therefore validates the central argument that institutional support is indispensable for the development of sustainable practices and that this support must be broad enough to address both financial and capability constraints (OECD, 2024b; World Bank, 2024).

In conclusion, sustainable development in organizations in North Macedonia should be understood as a coordinated process linking strategy, institutions and long-term development policy. The empirical evidence from this study shows that organizations are more likely to measure impact, improve energy efficiency and adopt environmental management systems when they use institutional support. The practical implication is clear: if policymakers wish to accelerate the sustainability transition, they must strengthen both financial and non-financial support mechanisms, align them with the realities of organizations, and embed sustainability more deeply in the educational, regulatory and developmental architecture of the country (United Nations, 2024; World Bank, 2024).

## **LIMITATIONS, PRACTICAL IMPLICATIONS AND FUTURE RESEARCH**

Although the study offers important evidence, several limitations should be acknowledged. First, the analysis is based on self-reported survey responses, which creates the possibility of perception bias and socially desirable answers. Organizations may overstate the extent of their sustainability orientation because sustainability has positive normative associations. This does not invalidate the findings, but it means that the results should be interpreted as evidence about reported organizational practice and commitment rather than as a full external audit of actual performance. Future studies could complement survey data with site visits, documentary analysis, reporting reviews or energy-use records in order to test how closely reported sustainability aligns with observed practice (Ali, 2021; Radu et al., 2023).

Second, the use of correlation analysis allows the paper to demonstrate meaningful relationships, but not strict causality. It is plausible that institutional support encourages sustainability implementation, yet it is also possible that more sustainability-oriented organizations are simply more likely to seek and use support. The most realistic interpretation is that the relationship is mutually reinforcing: support improves capacity, while organizations

with stronger strategic orientation are better positioned to absorb that support. This limitation suggests the value of longitudinal and mixed-method designs that can observe organizations over time and identify the mechanisms through which support translates into organizational change (Ullah et al., 2021; Mady et al., 2022).

Third, the sample is adequate for exploratory empirical analysis, but it does not capture every variation within the economy. Some sectors may be underrepresented, and the sustainability experiences of micro-enterprises may differ significantly from those of small, medium and large firms. Because micro and family-owned businesses are often especially resource-constrained, their sustainability trajectories deserve separate analytical attention. Expanding future research to include larger sector-specific or region-specific samples would strengthen generalizability and would help policymakers design more targeted support instruments for distinct groups of organizations (OECD, 2024b; Thanasi-Boçe et al., 2023).

Despite these limitations, the study has clear practical implications. For public institutions, the evidence indicates that sustainability policy should be designed around usability rather than formal availability alone. Programs that look comprehensive on paper may remain ineffective if application processes are too complex, co-financing thresholds are unrealistic or advisory services are fragmented. For that reason, support systems should be evaluated not only by their budget size but also by their accessibility, clarity and compatibility with the actual capacities of organizations. A usability-centered approach would likely increase uptake and improve the developmental impact of green-transition policy in North Macedonia (OECD, 2024a; World Bank, 2024).

For business support organizations, chambers of commerce, universities and consulting providers, the results imply that sustainability capability-building should become a routine part of enterprise development services. Training in ESG indicators, environmental management systems, impact measurement and resource-efficiency planning can help firms move from vague commitment to structured implementation. Partnerships among higher education institutions, municipalities and business associations may be especially valuable because they can localize expertise and reduce the cost of access for smaller firms. Such partnerships would also support the broader SDG agenda by strengthening the institutional infrastructure required for sustainable organizational development (United Nations General Assembly, 2015; United Nations, 2024).

For managers, the implication is that waiting for perfect conditions is rarely a productive strategy. Even when resources are limited, organizations can begin by identifying their most material social and environmental impacts, assigning internal responsibility, improving data collection and pursuing efficiency measures with short payback periods. These initial steps can improve readiness for larger sustainability investments and can make firms more capable of benefiting from future institutional programs. In that sense, institutional support and managerial initiative should be seen as complementary rather than sequential factors in the sustainability transition (Thomas et al., 2022; World Bank, 2024).

A further implication concerns measurement culture. Many organizations struggle because sustainability remains framed as an abstract value rather than as a set of manageable indicators linked to everyday decisions. Establishing a simple internal dashboard for energy use, employee development, compliance, stakeholder complaints, waste reduction or community engagement can help managers translate broad commitments into operational accountability. Once organizations begin to measure these areas regularly, sustainability becomes easier to discuss, compare and improve. In practical terms, better measurement culture can reduce uncertainty, strengthen learning and make both financial and non-financial support

more effective because external assistance can be linked to clearly identified organizational needs and outcomes (United Nations, 2024; Radu et al., 2023).

Future research should therefore go beyond the basic question of whether support matters and explore which combinations of support matter most for different organizational profiles. Comparative work between domestic and foreign-capital firms, between manufacturing and service firms, and between urban and regional settings could clarify how sustainability capabilities emerge under different institutional conditions. There is also strong value in examining how digitalization, ESG reporting demands and circular-economy policies reshape organizational incentives over time. Such research would deepen understanding of how North Macedonia can move from fragmented sustainability adoption toward a more systematic and inclusive model of organizational development aligned with contemporary European and global sustainability agendas (OECD, 2024a; Radu et al., 2023).

## REFERENCES

1. Ademi, A. (2024). Circular business models: Drivers and barriers to SMEs in North Macedonia. *Trends in Economics, Finance and Management Journal*, 6(1), 35–50. <https://doi.org/10.69648/VMCO6161>
2. Ali, M. (2021). A systematic literature review of sustainable entrepreneurship with thematic analysis. *World Journal of Entrepreneurship, Management and Sustainable Development*, 17(4), 742–764. <https://doi.org/10.1108/WJEMSD-11-2020-0150>
3. European Commission (2024). *North Macedonia Report 2024*.
4. European Commission (2024). *Green Agenda for the Western Balkans Progress Assessment*.
5. Hadzi Naumova-Mihajlovska, K., & Petroska–Angelovska, N. (2023). Implementation of green economy concept in SMEs: Empirical research in the Republic of North Macedonia. *Economic Development*, 25(3), 60–70.
6. Harrison, N. E. (2000). *Constructing sustainable development*. State University of New York Press.
7. Mady, K., Abdul Halim, M. A. S., Omar, K., Abdelkareem, R. S., & Battour, M. (2022). Institutional pressure and eco-innovation: The mediating role of green absorptive capacity and strategically environmental orientation among manufacturing SMEs in Egypt. *Cogent Business & Management*, 9(1), 2064259. <https://doi.org/10.1080/23311975.2022.2064259>
8. Maniruzzaman, A. F. M., Schwabach, A., Cockfield, A., Tarlock, D., Dernbach, J. C., & Kutting, G. M. (2010). *International sustainable development law (Vol. I)*. EOLSS Publishers/UNESCO.
9. McKinsey & Company. (2016). *The circular economy: Moving from theory to practice*. McKinsey & Company.
10. Mol, A. P. J., Sonnenfeld, D., & Spaargaren, G. (2009). *The ecological modernisation reader*. Routledge.
11. Monkelbaan, J. (2019). *Governance for the Sustainable Development Goals: Exploring an integrative framework of theories, tools, and competencies*. Springer Nature Singapore.
12. Nilsson, K., & Hynrich, L. (2006). *Nonprofit sector development*. Forum Syd.
13. OECD. (2001). *Policies to enhance sustainable development*. OECD Publishing.
14. OECD. (2024a). *A roadmap towards circular economy of North Macedonia*. OECD Publishing. <https://doi.org/10.1787/1973c88c-en>
15. OECD. (2024b). *Western Balkans competitiveness outlook 2024: North Macedonia*. OECD Publishing. <https://doi.org/10.1787/8207326d-en>
16. Oxford University Press. (2006). *Social entrepreneurship: New models of sustainable social change*. Oxford University Press.
17. Pascual, O., van Klink, A., & Roza Grisales, J. A. (2011). *Create impact! Handbook for sustainable entrepreneurship*. Envia – Innovators in Sustainability.
18. Radu, O. M., Dragomir, V. D., & Ionescu-Feleagă, L. (2023). The link between corporate ESG performance and the UN Sustainable Development Goals. *Proceedings of the International Conference on Business Excellence*, 17(1), 776–790. <https://doi.org/10.2478/picbe-2023-0072>
19. Rogers, P. P., Jalal, K. F., & Boyd, J. A. (2008). *An introduction to sustainable development*. Cromwell Press.
20. Rothaermel, F. T. (2012). *Strategic management: Concepts and cases*. McGraw-Hill Education.
21. Rudge, P. (2021). *Beyond the blue economy: Creative industries and sustainable development in small island developing states*. Routledge.

22. Schrijver, N. J. (2008). *The evolution of sustainable development in international law: Inception, meaning and status*. Martinus Nijhoff Publishers.
23. Segger, M.-C. S., & Khalfan, A. (2004). *Sustainable development law: Principles, practices, and prospects*. Oxford University Press.
24. Thanasi-Boçe, M., Kurtishi-Kastrati, S., Ramadani, V., & Zuferi, R. (2023). Sustainable entrepreneurship in North Macedonia: Challenges and perspectives. In V. Ramadani, S. Kjosev, & B. S. Sergi (Eds.), *Entrepreneurship development in the Balkans: Perspective from diverse contexts*. Emerald Publishing.  
<https://doi.org/10.1108/978-1-83753-454-820231011>
25. Thomas, A., Scandurra, G., & Carfora, A. (2022). Adoption of green innovations by SMEs: An investigation about the influence of stakeholders. *European Journal of Innovation Management*, 25(6), 44–63. <https://doi.org/10.1108/EJIM-07-2020-0292>
26. Ullah, R., Ahmad, H., Rehman, F. U., & Fawad, A. (2021). Green innovation and Sustainable Development Goals in SMEs: The moderating role of government incentives. *Journal of Economic and Administrative Sciences*, 39(4), 830–846.  
<https://doi.org/10.1108/JEAS-07-2021-0122>
27. United Nations. (2024). *The sustainable development goals report 2024*.  
<https://unstats.un.org/sdgs/report/2024/The-Sustainable-Development-Goals-Report-2024.pdf>
28. United Nations General Assembly. (2015). *Transforming our world: The 2030 Agenda for Sustainable Development (A/RES/70/1)*. United Nations.  
<https://sdgs.un.org/2030agenda>
29. World Bank. (2024). *North Macedonia climate public finance review: Integrating climate change perspectives into fiscal policy*. World Bank.  
<https://documents.worldbank.org/en/publication/documents-reports/documentdetail/099060724174031856>
30. World Commission on Environment and Development. (1987). *Our common future*. United Nations.