

CROSS REIS

CROSS-disciplinary network
for research excellence in
Regenerative Economy
Innovation eco-Systems

Montenegrin
International
Conference
on Economics
& Business
MICEB 2026
CROSS-REIS
EDITION

May 28 – 30, 2026
Podgorica, Montenegro

BOOK OF ABSTRACTS

**POLICY, GOVERNANCE
AND INTERNATIONAL
COOPERATION FOR
GREEN TRANSITION**



UNIVERSITY OF MONTENEGRO, FACULTY OF ECONOMICS
as a partner in CROSS-REIS project is organizing

Montenegrin International Conference
on Economics & Business
MICEB 2026 CROSS-REIS EDITION

**“Policy, governance and international cooperation
for green transition”**

May 28 – 30, 2026 / Podgorica, Montenegro

Location: University of Montenegro, Faculty of Economics
Jovana Tomaševića 37, 81000 Podgorica

FOREWORD

The CROSS-disciplinary network for research excellence in Regenerative Economy Innovation eco-Systems – **CROSS-REIS** project funded by the European Union under the **Horizon 2021-2027 European Excellence Initiative**, commenced on January 1, 2024, and will continue until December 31, 2028. The project's principal beneficiary from the University of Montenegro is the Faculty of Economics in Podgorica, while the project is supported by the Environmental Protection Agency of Montenegro and the ECO FUND (Environmental Protection Fund). This project interlinks cooperation among higher education and scientific research institutions from eight countries: Serbia, Montenegro, Albania, Croatia, Slovenia, Spain, Norway and Italy.

The CROSS-REIS project is focused on three key themes of the regenerative economy – circular economy, waste management, and urban biodiversity – with the goal of reducing the scientific research gap between highly developed EU countries and the region's countries in the field of the regenerative economy. The project aims to elevate excellence in science and create value through deeper and geographically inclusive collaboration among higher education and research institutions in 5 developing European countries and 3 leading science nations, to support the shift towards the regenerative economy paradigm.

Montenegrin International Conference on Economics & Business is organized under the framework of EU Horizon **CROSS-disciplinary network for research excellence in Regenerative Economy Innovation eco-Systems (CROSS-REIS)** project. The topic of the conference is **“Policy, governance and international cooperation for green transition”**. The aim is to bring together distinguished scientists, researchers, international business representatives, and economic policy creators, as well as to endorse optimal practices that foster economic growth and sustainable development, through entrepreneurship and innovation.

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FROM SOCIAL CAPITAL TO GREEN ENTREPRENEURIAL INTENTIONS: A MEDIATION ANALYSIS BASED ON THE THEORY OF PLANNED BEHAVIOR

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Abstract:

Sustainable entrepreneurship is increasingly recognised as an important driver of the green transition. However, social factors that encourage individuals to engage in sustainability-oriented venture creation remain insufficiently explored. Accordingly, this study examines how social capital, specifically family and peer influence, shapes entrepreneurial intentions in a sustainability context, interpreted here as a proxy for green entrepreneurial intentions. The analysis is grounded in the Theory of Planned Behaviour (TPB), focusing on three key constructs: attitude toward entrepreneurship, subjective norms, and perceived behavioural control.

The study draws on a sample of 445 respondents collected via a structured questionnaire. The analytical strategy follows a multi-stage approach using SPSS. First, descriptive statistics and independent samples t-tests are employed to compare TPB construct scores across social capital groups (family and peer influence), establishing baseline differences. Second, mediation analysis is conducted for two models, where family entrepreneurial background and peer entrepreneurial background are specified as independent variables, respectively. To examine the mediating role of TPB constructs in the relationship between social capital and entrepreneurial intentions, mediation analysis is performed using the PROCESS macro (Model 4). The results indicate that both family and peer entrepreneurial background have a significant indirect effect on entrepreneurial intention through TPB constructs. Bootstrapped confidence intervals confirm that the mediating variables significantly transmit this relationship. Furthermore, the direct effect of family entrepreneurial background on entrepreneurial intention decreases when mediators are included, suggesting that the relationship is largely explained through TPB mechanisms.

Although entrepreneurial intentions are measured using a general entrepreneurial intention scale, their interpretation within a sustainability-oriented framework allows them to be treated as a proxy for green entrepreneurial intentions. This represents a conceptual extension consistent with emerging research in sustainable entrepreneurship. The findings offer actionable insights for policymakers designing sustainable entrepreneurship ecosystems in transition economies, highlighting the role of family and peer networks as informal governance mechanisms in fostering green innovation.

Keywords: *green entrepreneurial intentions, social capital, theory of planned behaviour, mediation analysis, sustainable entrepreneurship*

OPERATIONALISING THE NEW EUROPEAN BAUHAUS: A STRATEGIC FRAMEWORK FOR URBAN BIODIVERSITY TRANSITIONS

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Abstract:

Urban sustainability transitions in Europe are often constrained not by a lack of solutions, but by fragmented governance structures and the absence of coherent strategic frameworks capable of integrating ecological, social, and economic objectives. In this context, biodiversity loss and the decline of ecosystem service provision in urban and peri-urban areas can be understood as symptoms of deeper coordination challenges across policy domains and governance scales.

This contribution addresses this gap by focusing on the role of integrated strategic frameworks in enabling green transitions. It presents the Central Europe Strategy for a New European Bauhaus (NEB) – based Urban Biodiverse Transition, developed within the URBIO BAUHAUS project (Interreg Central Europe). The strategy draws on the NEB initiative as both a normative and operational reference, mobilising its core principles – sustainability, inclusion, and aesthetics – to structure a comprehensive approach to urban transformation. The proposed governance architecture is articulated along four interrelated dimensions: collaborative governance for nature, nature-positive urban design, regenerative urban economies, and community-driven urban futures. Within these domains, a range of complementary approaches are positioned as operational levers, including nature-based solutions, co-design methodologies, and innovative financing mechanisms.

The strategy has been informed and iteratively refined through its application in four Central European urban contexts, where living lab processes have been used to test governance configurations, decision-support approaches, and stakeholder engagement formats. These experiences provide insights into the conditions under which integrated strategies can facilitate alignment across actors and sectors, as well as the institutional barriers that may hinder their implementation.

Keywords: *nature-based solutions, New European Bauhaus, Central Europe, urban transition*

THE IMPACT OF 3D PRINTING ON EUROPEAN STRATEGIC AUTONOMY: AGENT-BASED MODELING AND SIMULATION

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Abstract:

The crisis of the liberal international order, driven in particular by the wars in Ukraine and the Middle East, disruptions in global supply chains, the rise of protectionism, and intensifying tensions in the struggle for global hegemony between the United States and China, renders the development of the European Union's strategic autonomy increasingly imperative. In this context, a significant source of vulnerability stems from the EU's insufficiently developed technological sector and its inability to compete with American and Chinese technology conglomerates. These actors are becoming increasingly resilient to traditional advantages in international trade, such as economies of scale, while simultaneously acquiring the capacity to extract rents on a global scale and to shape the techno-feudal characteristics of the contemporary socio-economic system.

The EU's position is further constrained by deindustrialization, which has emerged as a consequence of the globalization and the relocation of a substantial share of production to countries of the Global South. Nevertheless, the Union retains a window of opportunity to reduce its lag in strategically significant domains and to attain a level of autonomy that may serve as a foundation for the establishment of new rules within the global order. In this regard, industry is acquiring a distinct geopolitical dimension through the adoption of 3D printing technologies. 3D printing constitutes a manufacturing technology characterized by an additive production process, based on a digitally generated three-dimensional model transmitted to a 3D printing device, whereby objects are constructed layer by layer from the base upward. The adoption of 3D printing has the potential to fundamentally transform the EU economy in support of aspirations toward the relative self-sufficiency of a technologically advanced society, thereby mitigating the effects of external shocks that exacerbate economic cycles. A significant reduction, or even the complete elimination, of assembly lines and traditional supply chains for numerous products can be expected, along with a decrease in CO₂ emissions associated with production and transportation and lower overall energy consumption.

To capture the dynamics of the impact of 3D printing on the EU's strategic autonomy, agent-based modeling and simulation is employed. Within this framework, interactions among actors are defined through the specification of behavioral rules, which serve as inputs for computational simulations. This methodological approach extends conventional paradigms of scientific inquiry and may provide valuable insights for European policymakers in planning the Union's geostrategic positioning in the global arena.

Keywords: *strategic autonomy, EU, 3D printing, simulation*

THE ROLE OF BATTERY SYSTEMS IN INTEGRATING RENEWABLE ENERGY IN DEVELOPING COUNTRIES: REGULATORY AND MARKET CHALLENGES

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Abstract:

The increasing share of renewable energy sources in developing countries further emphasizes the need for flexible and reliable energy storage solutions. Among these, battery energy storage systems (BESS) have emerged as a key technology for integrating variable renewable energy sources, such as solar and wind power, into electricity systems. However, despite their technical and economic potential, the widespread deployment of battery systems in developing countries remains constrained not only by financial and infrastructural challenges, but also by underdeveloped regulatory frameworks and electricity markets. Energy markets in developing countries are often insufficiently developed to adequately value key services provided by battery systems, such as system balancing, frequency and voltage regulation, price arbitrage, and flexibility services. The limited development of these market mechanisms directly affects the profitability of battery projects and reduces their investment attractiveness.

This paper analyzes the role of battery systems in integrating renewable energy in developing countries, with a particular focus on challenges arising from regulatory gaps and underdeveloped electricity markets. It argues that battery systems should not be viewed solely as a technical add-on to renewable energy projects, but rather as a strategic component of the energy transition that can enhance grid flexibility, increase system reliability, reduce curtailment of renewable generation, and enable more efficient use of existing infrastructure. Particular attention is given to issues such as licensing, market access, cost recovery mechanisms, technical standards, and the institutional readiness of the electricity sector. Furthermore, the paper examines the impact of underdeveloped regulatory and market environments on investment decisions and the long-term profitability of projects involving battery systems.

With the growing share of renewable energy sources, the importance of battery systems is expected to increase further, particularly in terms of ensuring flexibility and stability in power systems. In this context, the future integration of developing countries' energy markets with the European Union market represents a significant factor that can stimulate the development of market mechanisms, improve regulatory frameworks, and enable better valuation of services provided by battery systems. In conclusion, the paper highlights that clearer regulation, more developed electricity markets, and stronger institutional support are essential prerequisites for unlocking the full potential of battery systems in integrating renewable energy in developing countries.

Keywords: *battery energy storage systems, renewable energy, developing countries, electricity market, regulatory gaps, energy transition*

RETHINKING URBAN DIGITAL TWINS: FROM TECHNICAL INNOVATION TO INCLUSIVE GOVERNANCE SYSTEMS

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Abstract:

Urban digital twins as tools for planning, governance, and decision-making are emerging rapidly. While widely promoted as transformative technologies capable of enhancing efficiency, transparency, and citizen engagement, their practical implementation reveals significant limitations. Drawing on expert survey data, we identify a persistent gap between the promise of participatory governance and the reality of expert-driven development. Three overlapping user groups – technicians, theorists, and consumers – shape digital twins in distinct ways, often leading to tensions between technical sophistication, conceptual framing, and practical usability. Current systems remain largely dominated by technical logics, limiting meaningful citizen participation and reinforcing existing power structures. We argue that digital twins should be understood not as neutral technological tools but as socio-technical systems embedded within governance contexts. It highlights the need for interdisciplinary collaboration, institutional integration, and capacity building to enable inclusive and effective use. Furthermore, aligning digital twins with broader policy goals such as sustainability and equity is essential. Ultimately, a shift from viewing digital twins as technological solutions toward recognising them as platforms for negotiation, learning, and more democratic urban governance is essential.

Keywords: *urban digital twins, inclusive governance, urban modelling and simulation*

FISCAL POLICY, INCOME INEQUALITY, AND SOCIAL SUSTAINABILITY: A STATE-DEPENDENT ANALYSIS

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Abstract:

This paper examines how income inequality shapes the effectiveness of fiscal policy and discusses its implications for social sustainability. While a growing body of literature highlights the state-dependent nature of fiscal multipliers, relatively limited attention has been devoted to the role of income distribution as a conditioning factor in macroeconomic stabilization. The analysis focuses on a balanced panel of 27 European countries over the period 2001–2024. Fiscal shocks are proxied by changes in the fiscal stance, while inequality is measured using both market income inequality and post-tax, post-transfer inequality, allowing for a distinction between market-driven and redistributive channels. To capture dynamic responses, the paper employs the Local Projections approach to estimate impulse response functions across horizons 0–5. The empirical framework further incorporates a recession indicator, enabling the joint analysis of macroeconomic conditions and inequality regimes. The main objective of the paper is to assess whether fiscal policy effectiveness varies systematically across different levels of inequality and business cycle conditions. By linking fiscal transmission mechanisms to income distribution, the paper contributes to the broader discussion on social sustainability and the role of public policy in promoting inclusive and resilient economic systems.

Keywords: *fiscal policy, income inequality, social sustainability, local projections*

THE ROLE OF ESG PRACTICES IN SUPPORTING THE GREEN TRANSITION IN MONTENEGRO: CLIENT EXPECTATIONS, GREEN BANKING PRODUCTS, AND REGULATORY CHALLENGES

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Abstract:

This paper examines how environmental, social and governance (ESG) practices in the Montenegrin banking sector can support the green transition through client expectations, green banking products and stronger regulatory governance. The analysis combines a review of ESG and green banking literature with empirical evidence from a survey of 381 banking clients in Montenegro. The results show that clients' ESG awareness remains low to moderate, while the perceived importance of ESG is substantially higher. Positive perceptions of ESG practices are strongly associated with trust, loyalty and willingness to recommend a bank. Transparency and regular communication are particularly important, because clients value ESG initiatives more when they understand them and perceive them as credible rather than declarative. The most frequently expected initiatives are active community support, green loans, rewards for sustainable behaviour, e-statements and more visible reporting. The paper argues that ESG can become a practical instrument of green transition in Montenegro only if banks move from reputational communication to measurable products, client education and standardized reporting. Policy recommendations focus on national ESG reporting standards, a local sustainable finance taxonomy aligned with EU rules, capacity building and incentives for green products.

Keywords: *ESG, green banking, sustainable finance, trust, loyalty, Montenegro, green transition*

THE GREEN PRESSURE PARADOX: LOOKING GREEN VS BEING GREEN

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Abstract:

The transition toward a more sustainable economy has placed increasing pressure on companies to demonstrate environmental responsibility through their strategies and communication. While this pressure is expected to encourage sustainability practices, it may also produce an unintended consequence: a growing incentive for firms to appear environmentally responsible without fully committing to meaningful change. This paper explores this tension through the concept of the green pressure paradox.

Drawing on literature on perceived greenwashing and consumer behavior, the paper argues that sustainability has become a critical reputational signal in competitive markets, but, it's one that is difficult for consumers to verify. As a result, firms can obtain significant reputational and economic benefits from communicating environmental responsibility, even when their actual practices fall short. This creates a structural imbalance in which symbolic actions, such as vague claims and selective disclosure, sustainability-focused branding, and the use of ambiguous eco-labels, can be more immediately rewarding than costly operational transformations.

The paper integrates insights from marketing, signaling theory and sustainability research to conceptualize greenwashing as a strategic response to external pressures (such as consumers' preference toward sustainable brands, regulators' pressure through frameworks and ESG reporting, investors' pressure through necessary ESG metrics, as well as competitors' pressure because everyone is "going green"), information asymmetry and limited verification mechanisms. However, while such strategies may yield short-term gains, they carry significant long-term risks, which include erosion of consumer trust and a decline in perceived brand value. Empirically, these relationships are examined through survey-based research assessing how different types of green claims influence consumer perceptions, attitudes, trust and purchase intentions.

By framing greenwashing as a systemic outcome rather than an isolated practice, this study highlights the need for stronger governance and clearer standards, alongside more effective monitoring and enforcement mechanisms, to ensure that sustainability communication aligns with actual environmental performance.

Keywords: *greenwashing, sustainable marketing, consumer perception*

IMPACT OF CARBON FOOTPRINT OF BANK CREDIT PORTFOLIOS AND ENVIRONMENTAL POLICY STRINGENCY ON NON-PERFORMING LOAN LEVELS: AN EMPIRICAL COUNTRY-LEVEL ANALYSIS

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Abstract:

This paper analyzes the relationship between the carbon exposure of bank credit portfolios and the level of non-performing loans at the country level. The research focuses on whether lending directed toward sectors with high greenhouse gas emissions increases the risk of asset quality deterioration in the banking sector, particularly under stricter climate regulation. Using panel data covering multiple countries and time periods, a model was developed linking the carbon intensity of lending and the stringency of environmental policies at the country level with realized non-performing loan ratios, along with control variables. The results indicate that banks with a higher share of "brown" loans record higher levels of credit risk, which has significant implications for the development of a climate-sensitive prudential framework. In addition, this paper examines the challenges and opportunities for regulatory authorities in transition countries, such as Montenegro, which find themselves at a crossroads between green transformation and the preservation of financial stability.

Keywords: carbon exposure, non-performing loans, climate transition risk, regulatory policy, green economy, Montenegro

SUSTAINABILITY REPORTING ASSURANCE: THE ROLE OF INDEPENDENT ASSURANCE PROVIDERS AND ASSURANCE STANDARDS

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Abstract:

This paper provides a structured overview of sustainability reporting assurance with the aim of understanding the role of audit and consulting firms in enhancing the credibility of sustainability disclosures. As sustainability reporting becomes increasingly relevant due to regulatory pressures and stakeholder demands, concerns regarding the reliability of disclosed information – particularly issues such as greenwashing and selective reporting have grown significantly. In this context, independent assurance emerges as a key mechanism in strengthening trust and transparency in sustainability reports.

The paper focuses on a comparative review of key international standards governing sustainability assurance, including frameworks issued by the International Auditing and Assurance Standards Board (IAASB), such as ISAE 3000 (revised), as well as standards developed by other bodies like Accountability (AA1000AS). Particular attention is given to the scope, methodology, and level of assurance, prescribed by these standards, along with their applicability in different regulatory environments. Furthermore, the study explores how audit firms and consulting companies participate in the assurance process, examining their methodologies, independence considerations, and the challenges they face in verifying ESG data in sustainability reports. The analysis highlights differences between financial statement audits and sustainability assurance engagements, especially in terms of subjectivity, data availability, and the use of qualitative indicators.

This study also addresses the risk of greenwashing and, based on a comprehensive review of the literature, investigates the extent to which limited and reasonable assurance can mitigate this risk by strengthening the reliability of sustainability information in terms of accuracy, completeness, and consistency. The analysis further reveals important gaps in the field, particularly the absence of globally consistent standards and the heterogeneity of assurance quality across providers and jurisdictions.

The literature suggests that sustainability assurance clearly improves the credibility of sustainability reporting; however, in most countries it is still predominantly applied at a limited assurance level. This highlights the need for further development and harmonisation of standards that would more clearly guide the transition towards reasonable assurance and provide a consistent framework for its implementation. At the same time, existing standards are numerous and often perceived as confusing, which further underscores the need for stronger regulatory clarity and enforcement mechanisms, including potential sanctions for companies that fail to ensure adequate control and reliability of their sustainability disclosures.

Keywords: *assurance, sustainability, ESG, greenwashing, audit*

FINMAN SYSTEM FOR IMPROVING FINANCIAL PERFORMANCE AND SUSTAINABILITY OF MINING COMPANIES: AN OVERVIEW OF THE SMARTMEN PROJECT

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Abstract:

The sustainability of mining companies is a multidimensional concept encompassing economic, organizational, social and safety-related dimensions of business operations, with financial performance serving as one of the key indicators of long-term competitiveness. Decision-makers in the mining industry frequently face the challenge of interpreting large volumes of financial data in a timely manner and translating them into concrete actions that support sustainable development. The existing literature lacks an integrated, explainable, and human-centered tool that would enable managers to systematically monitor and improve financial performance and sustainability based on objective data drawn from companies' financial statements. To address this gap, the EUREKA project SMARTMEN (Smart Toolbox for Mining's Resilience, Sustainability and Financial Performance Improvement), jointly implemented by research teams from Montenegro and Serbia, will develop the FINMAN module – a Web-based, Explainable, Human-Centered, AI-Assisted Decision Support System (DSS) for Financial Performance Improvement, and complementary module DESMAN focused on sustainability management and safety enhancement, whose integration delivers a comprehensive decision support solution for the mining industry.

FINMAN enables systematic analysis of financial performance indicators and identification of areas with potential for sustainability improvement in mining companies. Its methodological framework lies on the analysis of financial statements of Montenegrin mining companies sampled on 36 companies, providing objective quantitative indicators of profitability, liquidity, indebtedness, activity, efficiency and others. The system is an automated and AI-driven multi-criteria DSS for improving financial performance and sustainability. Development of the module will include defining the system architecture, implementing AI human-centered interface, designing a web interface tailored to end users, and validating the system on real-world data from mining companies in the region. The integrated SMARTMEN system thus enables a holistic approach to managing resilience, sustainability, and financial performance, linking financial indicators with organizational sustainability and occupational safety at the operational, tactical, and strategic levels. The project will also include a commercialization plan based on a techno-economic analysis, alongside the development of a SMARTMEN prototype ready for practical application.

The expected contribution of the FINMAN module lies in providing a scientifically grounded and practically applicable tool that supports informed managerial decisions on financial performance and economic sustainability, strengthening the competitiveness and long-term stability of mining companies in Montenegro and Serbia. The FINMAN methodology will rely on the analysis of audited financial statements from a representative sample of Montenegrin and a few Serbian mining companies, as well as the data from a questionnaire. To broaden this analysis, FINMAN will be integrated with the DESMAN module which includes data from structured questionnaire on sustainability factors distributed to managers of Serbian mining companies (n = 198). The integration of survey data with financial indicators will enable a more comprehensive analysis of the interdependencies among the different dimensions of sustainability of mining companies.

Keywords: FINMAN, SMARTMEN, DESMAN, resilience, sustainability, financial performance, decision support system, mining industry

ASSESSING CARBON EFFICIENCY IN EUROPE'S TOURISM SERVICE ECONOMY: A DEA-BASED CROSS-COUNTRY ANALYSIS

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Abstract:

Tourism plays an important role in the European economy, yet its continued growth is accompanied by increasing environmental pressures, particularly those related to carbon emissions and energy-intensive service activities. As the European Union advances towards climate neutrality, greater attention is being directed towards the ability of tourism-related sectors to generate economic value while limiting their environmental impact. This paper examines carbon efficiency across European countries within the broader tourism service economy. By applying Data Envelopment Analysis, the study evaluates relative performance using selected economic, employment and emissions-related indicators. The results aim to identify differences in environmental efficiency among countries and provide analytical insights that may support the transition towards more sustainable, resource-efficient and climate-responsible tourism development in Europe.

Keywords: carbon efficiency, DEA, tourism services, EU27

COOLING ACCESS: A SPATIAL INDEX FOR EVALUATING COOLING-EFFECTIVE GREEN INFRASTRUCTURE

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Abstract:

Urban heat islands (UHI) result from multiple interacting factors, with land cover characteristics such as sealed and built-up surfaces playing an important role. However, empirical studies show that these factors often do not satisfactorily explain the spatial variability of urban temperatures, leaving a substantial unexplained component. This remaining variability may be partly associated with additional processes, particularly those related to vegetation, shading, evapotranspiration, and water availability. Despite the recognized importance of green infrastructure (GI) in mitigating urban heat, most spatial assessments still treat green areas as either present or absent, or measure them mainly by their size or coverage. They rarely consider how effectively these areas contribute to cooling or how accessible they are. Existing approaches typically focus either on the cooling performance of green spaces or on their accessibility, but rarely combine both at the level of individual locations. This creates a gap between the presence of green space and its actual contribution to thermal comfort. This study addresses this gap by introducing a spatial index of access to cooling-effective green infrastructure. The index combines two components: (1) accessibility (A), defined as the network-based walking distance to the nearest public green space, and (2) quality (Q), defined as the cooling capacity of that green space, approximated by tree canopy cover. The resulting index ($K = A \times Q$) captures both proximity and functional performance of green infrastructure. The approach is applied to the case of Ljubljana (Slovenia), using a high-resolution spatial grid and integrating data on urban heat intensity, land cover, and vegetation structure. The index is compared with conventional green access indicators based solely on distance. The results show that areas with high urban heat exposure do not necessarily coincide with areas of low green presence, but rather with areas that have limited access to high-quality, cooling-effective green infrastructure. The comparison further shows that traditional accessibility metrics may overestimate the cooling potential available to urban residents. The proposed index is intentionally simple and transferable, making it suitable for practical use in urban planning. It helps identify priority areas where high heat exposure overlaps with insufficient access to effective cooling resources.

Keywords: *Urban heat island (UHI), green infrastructure (GI), cooling accessibility, spatial index, urban climate adaptation, network-based accessibility, urban planning*

DETERMINANTS OF HOTEL GUESTS' WILLINGNESS TO PAY A PREMIUM PRICE FOR SUSTAINABLE PRACTICES: EVIDENCE FROM SERBIA

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Abstract:

Sustainable practices in the hotel industry are increasingly going beyond the framework of socially responsible business and becoming an important instrument of market differentiation and competitive positioning. Although the contemporary literature frequently emphasizes the growing environmental awareness of hotel guests, the question remains to what extent such an orientation translates into consumers' actual willingness to accept a higher price for hotel services. The subject of this paper is the examination of hotel guests' willingness in the Republic of Serbia to pay a price premium for staying in hotels that implement sustainable environmental practices. The aim of the research is to determine whether, and to what extent, the importance guests attach to sustainability, their level of awareness, their degree of information, as well as their perception and evaluation of sustainable practices, influence their willingness to pay a higher price. The empirical research is based on data collected through a survey questionnaire administered to guests who had stayed in hotels in Serbia, while the analytical framework includes descriptive statistics, non-parametric tests, correlation analysis, and regression models. The results indicate that the majority of respondents are willing to accept a higher price provided that it remains within reasonable limits, with a moderate premium emerging as the most acceptable option. At the same time, the findings suggest that the importance guests attach to sustainability is a stronger predictor of willingness to pay more than mere awareness of green practices. Price level and the insufficient visibility of hotels' sustainable initiatives emerge as the main barriers. The scientific contribution of the paper lies in linking sustainability with the actual market behavior of hotel guests, while its practical contribution stems from the possibility of offering hotels guidelines for shaping pricing policy, communication, and market positioning strategies based on sustainability.

Keywords: *sustainable hotel industry, premium price, consumer behavior, environmental practices, hotel guests, Serbia*

CONTRIBUTION OF OLIVES TO REGENERATIVE AGRICULTURE AND RURAL ECONOMY – THE CASE OF ALBANIA

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Abstract:

Olive cultivation is a long-standing feature of Albania's rural and peri-urban landscape and plays an important role in both rural livelihoods and environmental sustainability. Beyond its economic function, olive farming is closely linked to land management practices that contribute to soil conservation, biodiversity, and climate adaptation. However, the extent to which these contributions are reflected in farmers' motivations and investment decisions remains limitedly explored in the Albanian context.

This study examines the role of olive cultivation in supporting regenerative agriculture and the rural economy, focusing on farmers' motivations for planting and maintaining olive groves and their willingness to contribute to their upkeep. The analysis is based on a structured survey of more than 200 olive farmers across different regions of Albania, capturing variation in farm characteristics, management practices, and socio-economic conditions.

The results show that economic considerations, particularly profitability and the production of olive oil for household consumption, are the main drivers of olive cultivation. Cultural factors and land-use considerations, such as avoiding land abandonment and maintaining family land, also play a relevant role. In contrast, policy-related incentives, including subsidies, appear to be of secondary importance. At the same time, a considerable share of farmers report a willingness to pay for the collective maintenance of olive groves, pointing to the potential for more coordinated or community-based approaches to landscape management.

Overall, the findings suggest that olive cultivation contributes to rural resilience not only through income generation but also through its environmental functions. Strengthening this contribution requires better alignment between farmers' economic incentives and the broader benefits of regenerative agriculture. The paper provides empirical evidence relevant for policies aimed at supporting sustainable land use and rural development in the context of the green transition.

Keywords: *regenerative agriculture, environmental sustainability, rural development olive cultivation, Albania*

GREEN TRANSITION IN THE SERBIAN TOURISM SECTOR: THE ROLE OF MUNICIPAL SUPPORT

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Abstract:

Government support programs are widely advocated as mechanisms to overcome barriers to green technology adoption in the tourism sector, yet empirical evidence of their effectiveness remains inconclusive. This study examines whether municipal support influences green technology adoption among 88 tourism enterprises across 16 districts in Serbia.

Data were collected through a structured questionnaire survey, capturing information on green technology adoption, perceived municipal support effectiveness, attitudes toward environmental sustainability, and firm characteristics. We employ multilevel linear regression to account for the nested structure of companies within districts and test whether perceived municipal support predicts number of green technologies adopted. Our analysis controls for firm characteristics including company size, age, tourism activity type, and perceived importance of environmental technologies. We supplement individual-level analysis with district-level examination to explore geographic patterns in support allocation and adoption outcomes. While our sample of 88 companies across 16 districts limits statistical power for district-level inference, the findings are robust and consistent across model specifications.

The findings reveal that municipal support shows no association with green technology adoption at either the individual level ($\beta = -0.009$, $p = 0.958$) or the district level ($r = -0.069$, $p = 0.800$). In contrast, company size emerges as the dominant predictor, with medium-sized firms adopting 1.72 more technologies than micro-enterprises ($p = 0.001$). Company age shows a marginally significant negative effect ($\beta = -0.042$, $p = 0.064$), while perceived importance of green technologies, tourism activity type, and legal form show weak or no significant associations with adoption.

District-level analysis uncovers a paradox: high-support districts demonstrate adoption rates identical to low-support districts. The lower-ranking districts achieve the highest adoption rate through large, well-resourced firms, while districts with predominantly micro-enterprises rank relatively high in support, but low in adoption. Support efficiency varies eight-fold across districts, driven entirely by firm capacity rather than policy design.

These findings suggest municipal support programs fail to address the barrier identified in prior research: capital constraints preventing small firms from financing high upfront costs. Policy implications point toward limited program availability and fundamental design flaws. There is a need for financial support mechanisms and redesigning existing programs.

Keywords: *green technology adoption, sustainable tourism, municipal government support, Serbia*

UNIFIED GREEN LANDING CRITERIA: A CORE GREEN TRANSITION ENGINE

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Abstract:

As the green transition continues to be the imperative for the European Union's future industrial and societal development its trajectory is now more than ever vulnerable to policy volatility driven by the external geopolitical and economic shocks. In this paper we examine the potential of the financial sector to act as a sort of a stabilising factor in the industrial transition. We argue that the approval process of credit financing, governed by the rigorous and standardized ESG requirements, offers a dependable mechanism for decarbonisation and shift towards green development compared to the fluctuating legislative mandates. By analysing current credit-risk frameworks and ESG integration this research aims to identify most common used criteria in banks and simultaneously identify the gaps. We then propose the future development goals for the critical need of unification of green lending criteria across the Eurozone. Such standardization would mitigate investment uncertainty while aligning the industrial output with the EU Taxonomy and establish a permanent market-led sustainable development trajectory.

Keywords: *green lending, green transition, financing transition, EU Taxonomy, green banking, sustainable financing*

INTERSECTING LANDSCAPES, UNEVEN TRANSITIONS: GOVERNANCE, SPATIAL JUSTICE AND GREEN DEVELOPMENT IN THE PRESPA LAKES BORDERLAND

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Abstract:

The Prespa Lakes region, shared by Albania, Greece, and North Macedonia, is a critical ecological hotspot and a classic “internal periphery” of Europe. It sits at the intersection of EU environmental directives, cohesion policy, and enlargement dynamics while remaining economically fragile and institutionally fragmented. This paper uses Prespa as a case to explore how green transition agendas, governance arrangements, and cross-border cooperation shape who benefits from “sustainability” – and who is left further behind.

Theoretically, the paper is grounded in the socio-spatial dialectic and the idea that space actively produces and reproduces social relations (Harvey 1973; Soja 1989, 2010). It deploys the notion of spatial justice, understood through its distributional, procedural, and recognitional dimensions (Fraser 2008; Soja 2010), to link classical core–periphery thinking and uneven development (Wallerstein 1974; Krugman 1991; Rodríguez-Pose 2018 on “places that don’t matter”) with debates on inner peripheries and territorial cohesion in Europe (Böhme et al. 2017). Within this framework, Prespa is approached as a laboratory where European environmental, cohesion, and border-governance agendas intersect with the lived realities of peripheral communities.

Empirically, the paper draws on territorial analysis, ecological and land-use mapping, and a review of more than two decades of cross-border initiatives under the Prespa Park framework. It shows that environmental and ecological policies have not halted the lake’s degradation, partly due to weak, under-resourced, and fragmented governance. Economic development incentives in agriculture, tourism, and infrastructure remain unevenly distributed around the lake, reinforcing existing disparities, while local communities – especially in the Albanian municipality of Pustec – are only marginally involved in decision-making on natural resources, tourism, and land use. Building on these findings, the paper proposes a governance- and policy-oriented agenda for a just and regenerative green transition in Prespa that combines strengthened transboundary management, regenerative place-based economic models, and a pilot approach to community-centered green transition in Pustec. It argues that the outcomes of a green transition in ecologically sensitive border regions depend critically on the quality of governance, the design of international cooperation, and the extent to which spatial justice is explicitly embedded in policy.

Keywords: *spatial justice, uneven development, internal peripheries, green transition, cross-border governance, Prespa Lakes, Western Balkans, regenerative development*

THE IMPACT OF TOP MANAGEMENT COMMITMENT ON THE DEVELOPMENT OF ESG PRINCIPLES IN COMPANIES: BETWEEN STRATEGY, CULTURE, AND REAL PRACTICE

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Abstract:

This paper explores how the commitment of top management shapes the development and implementation of ESG principles in modern companies, with a particular focus on the interaction between strategic leadership, organizational culture, and the regulatory framework of the European Union. The analysis starts from the premise that ESG is no longer a voluntary practice. Instead, it is increasingly becoming a regulatory obligation – especially in light of the EU's recently adopted omnibus regulatory package, which further tightens requirements related to sustainability, reporting, and corporate accountability. Within this context, the paper emphasizes that top management commitment remains a decisive factor in determining both the quality and depth of ESG implementation. The concept of “*tone from the top*” is identified as a critical mechanism through which regulatory requirements are translated into real organizational change, rather than being treated as a mere box-ticking exercise.

Drawing on the cultural framework of Geert Hofstede, the analysis highlights the role of national culture in shaping ESG interpretation and implementation. Empirical evidence suggests that country-level informal institutions significantly influence corporate ESG disclosure and behavior. In hierarchical and transition economies such as Montenegro, ESG implementation is particularly dependent on the individual commitment of top management and their capacity to transform regulatory constraints into strategic opportunities. As a practical example from Montenegro, the banking sector illustrates how ESG principles and regulatory standards are being integrated into credit policies and risk management frameworks, with senior leadership playing an active role in defining sustainability priorities. In contrast, the Danish company Ørsted represents a leading European best practice, where ESG and regulatory frameworks are not seen as constraints but as drivers of strategic transformation and long-term business model innovation.

The paper concludes that the evolving EU regulatory framework, including the omnibus package, further increases the importance of top management. Formal compliance alone is no longer sufficient – what matters is the genuine integration of ESG principles into corporate strategy and day-to-day decision-making. Successful ESG implementation ultimately depends on the synergy between regulatory pressure, leadership commitment, and cultural context. At the same time, the paper highlights several challenges that reveal the strong link between corporate culture and the level of ESG implementation. When this relationship is misaligned, it can lead to outcomes such as greenwashing, cultural mismatch, short-term ESG focus, or, ultimately, a lack of genuine commitment from top management.

Keywords: *ESG, top management commitment, corporate culture, strategic leadership, European Union regulation, ESG implementation, Geert Hofstede*

ESG IN THE MINING SECTOR: SUSTAINABILITY CHALLENGES AND THE IMPACT OF MANAGERIAL DECISION-MAKING IN MONTENEGRO

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Abstract:

Environmental, Social, and Governance (ESG) principles are playing an increasingly important role in the modern mining sector, particularly in the context of the green transition and the growing demand for critical minerals required for the development of renewable energy sources and low-carbon technologies. The mining sector is simultaneously recognized as a key driver of the energy transition, but also as a source of significant environmental, social, and governance challenges. Contemporary literature indicates that the application of ESG standards contributes to reducing business risks, improving transparency, and strengthening investor confidence, thereby enabling better access to financial markets and ensuring long-term business sustainability.

Research shows that the implementation of ESG principles in the mining sector is generally slow, uneven, and insufficiently effective. A particular challenge is the lack of standardized methodologies for measuring ESG performance, as well as the discrepancy between formal ESG ratings and actual conditions. It is evident that mining activities have significant negative impacts, including environmental degradation, pollution, conflicts with local communities, and issues related to corporate governance.

In the context of Montenegro, these challenges are further intensified by limited institutional capacities and an underdeveloped regulatory framework. Regulatory changes aimed at combating the informal economy and illegal exploitation represent an important step toward strengthening oversight and promoting more responsible resource management.

This paper aims to assess the level of readiness of the mining sector in Montenegro for the adoption of sustainability concepts and the integration of ESG principles into business operations, with a particular focus on the role of management in decision-making processes. The study seeks to examine the extent to which business decisions in mining companies can contribute to improving environmental, social, and governance standards, and to identify key obstacles and opportunities for their more effective implementation. Considering Montenegro's development potential and its status as a candidate for European Union membership, the paper further emphasizes the need to enhance the regulatory and institutional framework, as well as to align with EU sustainability standards.

Keywords: ESG, mining sector, sustainability, corporate governance, Montenegro

GREEN INVESTMENTS AND FINANCIAL PERFORMANCE IN MONTENEGRO'S ENERGY SECTOR IN THE CONTEXT OF THE GREEN TRANSITION

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Abstract:

The growing importance of research on green investments in the energy sector stems from increasingly pronounced global and regional pressures to steer business operations towards decarbonization and the transition to sustainable energy sources. In the context of Montenegro, this process gains additional significance through obligations arising from the European integration process and the alignment with the European Union's climate and energy policies. The energy sector represents one of the key pillars of economic development, but also one of the largest sources of emissions, which makes its transformation economically, environmentally, and socially significant.

In addition to environmental goals, increasing attention is being directed toward the financial dimension of the green transition, particularly the question of whether green investments are financially viable and sustainable in the long term. This issue is especially relevant for developing countries such as Montenegro, which face limited financial resources and the need for efficient investment management. The analysis of financial performance in the context of green investments enables informed decision-making at both the corporate and public policy levels.

In this context, this paper aims to examine the impact of green investments on financial performance in the energy sector of Montenegro, with a particular focus on assessing their profitability and long-term sustainability. The research seeks to answer the key question: Do investments in renewable energy sources contribute to improved financial performance in the energy sector?

The methodological approach is based on a quantitative analysis of financial data and investment indicators. In this regard, standard financial indicators will be applied, such as profitability ratios (ROA and ROE), operational efficiency (EBITDA), as well as liquidity and leverage indicators. In addition, the financial viability of green investments will be evaluated using discounted cash flow methods, including net present value (NPV), internal rate of return (IRR), and payback period. The analysis will also include a comparative approach, examining financial performance before and after investments in renewable energy sources.

The expected contribution of this paper lies in providing empirical insights into the financial effects of green investments in Montenegro's energy sector, thereby addressing the gap between theoretical approaches and practical implementation in a transition economy. The paper contributes to a better understanding of the relationship between sustainability and profitability, as well as to the identification of key factors influencing the financial success of green projects. Furthermore, the findings may have practical implications for decision-making processes at both the corporate level and in public policy design, particularly in the context of investment planning and alignment with green transition requirements.

Keywords: *green investments, financial performance, energy sector, green transition, Montenegro*

THE IMPACT OF PERCEIVED ESG PRACTICES ON TRUST AND LOYALTY AMONG BANK CLIENTS IN MONTENEGRO

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Abstract:

In the context of the green transition, the banking sector has a strategic role not only as a financial intermediary, but also as an institution that can guide clients, capital and everyday financial behaviour toward more sustainable practices. This paper examines how bank clients in Montenegro perceive environmental protection, social responsibility and corporate governance practices – ESG practices – and the extent to which these perceptions shape clients' trust, loyalty and willingness to recommend their bank. The topic is motivated by the growing importance of sustainable finance in Europe, as well as by the still limited visibility of ESG initiatives among banking clients in Montenegro. The aim of the research is to determine the level of awareness of ESG, assess the importance of transparency in ESG communication and examine whether ESG can become a practical tool for strengthening long-term relationships between banks and clients.

The empirical analysis is based on a survey conducted on a sample of 381 respondents, using descriptive statistics, correlation analysis, regression analysis, ANOVA and chi-square tests. The results show that clients' awareness of ESG practices is low to moderate, but also that positive perceptions of ESG are clearly associated with greater trust, stronger loyalty and a higher willingness to recommend the bank. Transparency and visibility of ESG initiatives stand out as key factors: clients value ESG more when banks clearly communicate concrete activities, measurable results and available products, such as green loans, electronic statements, rewards for sustainable behaviour and community-oriented programmes. The paper concludes that ESG in Montenegrin banking should not be viewed solely as a reputational or regulatory issue, but as a strategic instrument for strengthening competitiveness, engaging clients and supporting the green transition. Its impact depends on whether ESG activities are credible, clearly communicated and recognised by users of banking services.

Keywords: ESG, banking sector, trust, loyalty, green transition, Montenegro

CAN THE FINANCIAL SECTOR DRIVE THE GREEN TRANSITION? THE CASE OF MONTENEGRO

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Abstract:

This paper examines the role of the financial sector in supporting the transition towards a circular and sustainable economy, with a specific focus on Montenegro. The study analyzes how financial institutions – particularly the Central Bank of Montenegro and commercial banks, can influence the allocation of capital towards environmentally sustainable projects. The research is based on qualitative analysis of regulatory frameworks, institutional practices, and sectoral developments, complemented by a comparative perspective with European Union standards.

The findings indicate that, despite increasing awareness of environmental, social, and governance (ESG) criteria, sustainable finance in Montenegro remains underdeveloped and largely dependent on international financial institutions. The banking sector continues to prioritize consumption-oriented lending, while green financial instruments are still limited in scope and scale. Institutional constraints, including regulatory gaps, limited market development, and a shortage of bankable projects, further hinder the transition.

The paper argues that the financial sector in Montenegro has the potential to become a key driver of the green transition, but only through stronger regulatory alignment with EU standards, the development of domestic green financial instruments, and enhanced coordination between public and private actors. The study contributes to the broader discussion on policy, governance, and international cooperation in advancing sustainable finance in emerging economies.

Keywords: *sustainable finance, circular economy, green transition, ESG, banking sector, Montenegro*

GREEN TRANSITION IN THE WESTERN BALKANS: AN ANALYSIS OF CO₂ EMISSIONS, RENEWABLE ENERGY SOURCES AND ECONOMIC GROWTH

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Abstract:

The green transition in the Western Balkans presents a critical challenge, as countries must balance economic growth with decarbonisation. This study examines trends in carbon emission intensity and renewable energy adoption across six Western Balkan economies between 2000 and 2023. The analysis relies on World Bank indicators, focusing on CO₂ emissions per unit of GDP and renewable energy shares through longitudinal and comparative analysis. Bosnia and Herzegovina emits 92 times more CO₂ per unit of GDP than the EU average, while Serbia emits 73 times more. All analysed countries show a reduction in emission intensity over the observed period, ranging from 68 to 98 percent, yet the starting point was far from the European standard, indicating that progress exists but the path to alignment with EU norms remains long. Kosovo recorded the smallest improvement, only 15 percent reduction, due to its structural dependence on lignite as the dominant energy source. A particularly notable finding is that no economic recession in any of the six countries during any year was accompanied by an increase in emissions, which challenges the widespread assumption that ecology and economic growth are necessarily in conflict. Albania records the highest share of renewable energy sources, owing to the dominance of its hydropower sector, while Kosovo and Serbia are advancing most slowly in this area.

The region's lag in the green transition stems from structural economic constraints rather than lack of commitment. Energy systems have long relied on coal and lignite due to limited investment alternatives and underdeveloped infrastructure. These sectors still employ a significant share of the workforce, making rapid phase-out socially and economically disruptive. Transitioning to renewable energy requires substantial capital for infrastructure, smart grids, and storage technologies – resources that remain largely inaccessible without external financial support.

This paper contributes to the understanding of structural constraints in the Western Balkans' green transition, highlighting the gap between emission reductions and convergence with EU environmental standards. The green transition is not merely an environmental issue; it is a question of the economic future of the entire region.

Keywords: *green transition, CO₂ emissions, renewable energy sources, Western Balkans, data analytics*

CHALLENGES AND LIMITATIONS IN THE APPLICATION OF THE ENVIRONMENTAL DIMENSION OF ESG PRINCIPLES IN THE NON-LIFE INSURANCE SECTOR IN MONTENEGRO

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Abstract:

The aim of this research paper is to identify and analyze the challenges and limitations in the implementation of the ESG (Environmental, Social, and Governance) concept in the non-life insurance sector in Montenegro, as well as to evaluate the impact of the environmental dimension of ESG on business processes and the performance of insurance companies.

The importance of ESG standards has significantly increased following the adoption of the CSRD (Directive (EU) 2022/2464). However, the implementation of this Directive presents challenges for insurance companies, while simultaneously creating opportunities to achieve and maintain a competitive advantage in the market.

The research is based on a qualitative methodology, primarily conducted through interviews with representatives of non-life insurance companies operating in Montenegro. The findings indicate that insurance companies are becoming increasingly aware of the importance of ESG reporting and its integration into business practices, although the level of implementation remains insufficient and there is a noticeable delay in the adoption of ESG principles.

As institutional investors, insurance companies have a significant role in mitigating the effects of climate change and reducing their carbon footprint. The study highlights the need for the development of sustainable and environmentally responsible insurance products, as well as the integration of non-financial risks particularly climate-related risks into core business strategies. Given the increasing frequency and severity of natural disasters, failure to adequately address these risks may have significant consequences for the stability and performance of insurance companies.

The results suggest that ESG analysis can enhance risk assessment models and support more accurate insurance premium pricing. Through a proactive approach to ESG integration, insurance companies can strengthen their resilience, contribute to climate change adaptation, and support the development of more sustainable and resilient economies.

Keywords: *non-life insurance, ESG, CSRD Directive, climate change, non-financial risks*

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