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SUSTAINABILITY AS A DRIVER OF ECONOMIC WELL-BEING IN EMERGING ECONOMIES

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Purpose of the article: *The article analyzes sustainability as a key driver of long-term economic well-being in emerging economies, focusing on the balance between growth, social inclusion, and environmental protection. It explores how sustainability-oriented strategies enhance economic resilience, social equity, and environmental efficiency, particularly in the context of new EU member states and the Republic of Moldova.*

Methodology: *The research employs a comparative and qualitative approach that combines literature review, documentary analysis, and empirical evaluation of indicators related to economic performance, renewable energy, and social inclusion. Case studies from Romania, Bulgaria, and Moldova illustrate how sustainability policies influence growth, financial stability, and social cohesion, enabling cross-country comparison and contextual insight.*

Conclusions: *The study concludes that sustainability fosters economic resilience, promotes inclusive growth, and accelerates convergence with EU economies. Policies encouraging renewable energy, green innovation, and social inclusion contribute to long-term stability and welfare.*

Originality: *The originality lies in linking sustainability theory with empirical evidence from emerging European economies, highlighting Moldova's progress within the EU convergence framework and offering practical insights for policy design.*

Keywords: *Sustainability, Economic well-being, Emerging economy, Financial resilience, Social inclusion.*
JEL Classifications: O44, I31, Q01

INTRODUCTION

Sustainable development has moved to the forefront of economic policy discussions as countries recognize that long-term prosperity depends on balancing economic growth with social and environmental health (Stiglitz, 2018). This is especially true for emerging economies in Europe, including newer EU member states and EU candidate countries like Moldova. These nations face the dual challenge of accelerating economic convergence with Western Europe while ensuring that growth is inclusive, resilient, and environmentally sustainable. The European Union's policy framework – from the Sustainable Development Goals (SDGs) to the European Green Deal – emphasizes that economic well-being must be pursued in tandem with climate action, resource efficiency, and social cohesion (Eurostat, 2024).

The context for emerging EU economies is shaped by a history of transition and current global challenges. Countries like Romania and Bulgaria, which joined the EU in the 2000s, and Moldova, which is pursuing EU accession, have made significant strides in economic growth and poverty reduction. However, this growth has often come with environmental strains (e.g. high carbon emissions, pollution) and social disparities. Climate change, in particular, poses new risks to these economies' agriculture, energy systems, and overall stability (World Bank, 2023). At the same time, investments in sustainable practices – such as renewable energy infrastructure, energy efficiency, and human capital – offer an opportunity to boost economic well-being and resilience. For instance, improving energy efficiency can lower costs and enhance energy security, while investing in education and health strengthens the workforce and social stability, reinforcing economic growth.

The objectives of this article are threefold. First, we establish the theoretical and empirical linkages between sustainability and economic well-being, drawing on literature and global expert insights. Second,

we detail a methodology for examining these linkages in emerging European economies, and present case studies of Romania, Bulgaria, and Moldova (along with references to other relevant cases) to illustrate successes and challenges. Third, we discuss how sustainability contributes to economic resilience and long-term well-being in these cases, and derive policy recommendations. Ultimately, we argue that sustainability is not just an environmental or social concern but a fundamental economic strategy for emerging economies aiming for prosperity and stability in the 21st century.



Fig. 1.1. Overview of EU progress towards SDGs over the past five years (2017–2022).
*Note:*Green arrows indicate significant progress on economic and social goals (e.g. SDG 8 "Decent Work and Economic Growth" and SDG 10 "Reduced Inequalities"), while yellow and red arrows indicate moderate or negative trends on goals such as climate action (SDG 13) and affordable clean energy (SDG 7).*
***Source:** Elaborated by the author based on (Eurostat 2024).*

The concept of sustainability in economic development is grounded in the idea of meeting present needs without compromising the ability of future generations to meet their own needs (the Brundtland Commission's classic definition). In practice, sustainability is often described as resting on three pillars: economic, social, and environmental. Far from being in conflict, these dimensions can be mutually reinforcing. Scholars and international commissions have argued that focusing narrowly on Gross Domestic Product (GDP) can mislead policy; instead, broader measures that include health, education, and environmental quality provide a better gauge of societal well-being (Stiglitz, 2018). Stiglitz et al. (2009) famously concluded that GDP is not a good measure of well-being, urging a shift to metrics that account for environmental sustainability and social progress (Stiglitz, 2018). As Stiglitz notes, if we measure only material output and ignore health, education, and the environment, "we become more materialistic" and risk doing "the wrong thing" in policy. This theoretical perspective implies that truly sustainable economic growth should enhance overall quality of life and preserve the natural and social capital on which future prosperity depends.

Leading economists underscore that sustainable development and economic performance are compatible goals. Joseph Stiglitz argues that protecting the environment need not impede growth; indeed, "environment and economic growth are complementary, especially if we measure growth correctly (taking into account sustainability)" (Stiglitz, J., 2016). In other words, once factors like resource depletion or pollution are internalized, sustainable practices often prove economically beneficial. Similarly, Jeffrey Sachs emphasizes that achieving sustainable development requires both "green economies and universal inclusion in services" – integrating environmental goals with investments in education, health care, and social protection (Sachs, 2023). Sachs and colleagues have highlighted that the countries closest to reaching the SDGs (e.g. Finland, Sweden) tend to be high-income nations that combine strong economies with strong social welfare and environmental performance. This suggests a model for emerging economies: sustainability can be a path to greater prosperity, not a hindrance.

International organizations echo these views. The World Bank has championed the concept of "inclusive green growth", arguing that "greening growth is necessary, efficient, and affordable" for sustainable development (World Bank, 2012). This entails growth strategies that improve resource efficiency, invest in clean technologies, and inclusively distribute the gains. The World Bank's analysis refutes the old notion of "grow now, clean up later" as misleading, showing that environmental degradation imposes real economic costs and that early action can save money in the long run (World Bank, 2012). Empirical data support that unchecked pollution, climate change, and ecosystem loss can undermine growth by damaging public health, productivity, and assets. For example, the IMF warns that climate change is a "major threat to long-term growth and prosperity" with direct impacts on economic well-being. Conversely, climate action and disaster resilience are increasingly seen as macroeconomic imperatives to safeguard growth (IMF, 2025).

Empirical research on emerging economies provides evidence that incorporating sustainability yields dividends for economic well-being. Studies have found that countries with higher "genuine savings" (a World Bank measure adjusting national savings for investments in human capital and depletion of natural resources) tend to achieve higher long-term growth and subjective well-being, indicating that maintaining natural and human capital supports future prosperity. In Central and Eastern Europe, a region that has experienced rapid growth alongside environmental challenges, data show that the cost of environmental degradation (e.g. health costs of air pollution, flood damages from deforestation) can amount to several percentage points of GDP. Reducing such degradation therefore has substantial economic benefits in avoided losses.

At the same time, positive examples are mounting. Investments in renewable energy and energy efficiency often create jobs and reduce energy expenses, improving both economic output and household welfare. The World Bank (2023) finds that Romania, for instance, could triple its national income by 2050 while cutting emissions to net-zero, provided it implements structural reforms and sustainable investments (World Bank, 2024). This scenario underscores that decarbonization and growth can proceed together. Moreover, climate adaptation measures – such as better water management and climate-resilient infrastructure – are shown to protect productive sectors (agriculture, energy, etc.) from shocks, thereby stabilizing incomes. An IMF study on climate and growth even concludes that "contrary to conventional wisdom, taking stronger actions on climate change may enhance economic growth" by spurring innovation and preventing damage. In emerging Europe, adopting a more sustainable growth model with improved resource efficiency and social inclusion has been recommended as essential for long-term convergence to Western European income levels.

Social sustainability (e.g. education, equality, health) is similarly vital to economic well-being. Inclusive policies that reduce inequality and invest in human capital tend to boost productivity and social stability. The EU's experience shows that progress on SDG 8 (decent work & growth) and SDG 10 (reduced

inequalities) has gone hand-in-hand in recent years (Eurostat, 2024). Scholars note that high inequality can undermine growth by fueling instability and wasting human potential, whereas inclusive growth creates a virtuous cycle of broad-based prosperity. Thus, empirical and theoretical perspectives align on a key point: sustainability – integrating economic, social, and environmental objectives – is a critical driver of true economic well-being. This forms the basis for the following analysis of specific country cases.

MATERIALS AND METHODS

This study employs a qualitative, comparative analysis to examine how sustainability initiatives contribute to economic well-being in emerging European economies. The methodological approach integrates multiple secondary data sources to explore the relationship between sustainability policies and economic outcomes. Emerging economies were selected based on three criteria: (1) classification as emerging or upper-middle-income European states, (2) engagement in sustainability-related reforms such as environmental policies, climate strategies, or social development programs, and (3) availability of credible and consistent data from international institutions. These selection criteria ensure that the analysis captures a representative spectrum of sustainability experiences within the context of European economic transitions.

Data for the study were collected from reputable institutional sources, including World Bank Country Diagnostics, UNDP development reports, IMF policy assessments, OECD environmental and economic performance reviews, and Eurostat Sustainable Development Goal (SDG) monitoring reports. These documents provide a combined dataset of quantitative indicators—such as GDP growth, energy intensity, carbon emissions, poverty rates, and human development measures—and qualitative evaluations, including expert analyses of policy implementation and governance conditions. Academic literature by leading economists in the field of sustainable development further contextualized these findings and supported the interpretation of patterns across countries.

A triangulation approach guided the analytical process, allowing the integration of quantitative trends with qualitative insights to identify recurring mechanisms linking sustainability to economic well-being. The comparative method enabled the identification of common themes across emerging economies, focusing specifically on economic dimensions (growth stability, income improvements, employment effects, fiscal resilience) while also incorporating social and environmental factors insofar as they influence economic outcomes. This approach highlights how sustainability operates simultaneously through direct economic channels—such as renewable energy investments or resource efficiency—and indirect channels related to institutional capacity, social inclusion, and climate adaptation.

Given the multifaceted nature of sustainability, the study adopts an interpretive analytical framework that synthesizes diverse types of evidence. While the reliance on secondary data represents a methodological limitation, the use of multiple high-quality sources compensates for this by improving reliability and reducing potential bias. Attribution challenges—specifically the difficulty of isolating the economic effects of individual sustainability policies—are addressed by emphasizing patterns supported across datasets and by acknowledging the complexity of causality in macroeconomic systems.

Overall, this methodological design provides a robust and holistic foundation for understanding how sustainability functions as a driver of economic well-being in emerging economies and supports the development of a comparative evidence base suited for scientific interpretation.

RESULTS AND DISCUSSIONS

The results of this research highlight how sustainability, approached through environmental, social, and economic reforms, becomes a structural driver of economic well-being in emerging European economies. Although each country demonstrates specific contextual nuances, the comparative evidence

shows a consistent pattern: green growth, social inclusion, and resilience-oriented reforms significantly enhance long-term economic performance, reduce vulnerability to shocks, and strengthen institutional convergence with the European Union. The discussion below synthesizes the main results, structured around the illustrative cases of Romania, Bulgaria, and Moldova, followed by broader regional insights.

The comparative assessment of Romania, Bulgaria, and Moldova reveals a coherent pattern: sustainability has emerged as a central driver of economic well-being in emerging European economies, despite differing levels of development, institutional capacity, and EU integration. Rather than representing a constraint on growth, sustainability-oriented reforms function as strategic instruments for strengthening competitiveness, reducing systemic vulnerabilities, and building long-term resilience. The analysis demonstrates that while each country's trajectory reflects unique historical and structural conditions, they converge around a shared understanding that environmental, social, and institutional investments produce measurable and mutually reinforcing economic benefits.

Table 1.1. Comparative Analysis of Sustainability as a Driver of Economic Well-Being in Emerging European Economies

Dimension	Romania	Bulgaria	Moldova	Comparative Insights
Economic Development Level	Upper-middle-income EU member; sustained GDP growth and poverty reduction.	Poorest EU member by GDP per capita; persistent regional disparities.	Lower-middle-income; EU candidate; high vulnerability to external shocks.	All three pursue convergence with EU standards but differ in economic resilience and fiscal capacity.
Key Sustainability Challenges	High climate vulnerability (floods, droughts); carbon intensity ~2.5× EU average; infrastructure gaps.	One of the highest GHG intensities per GDP in the EU; coal dependence; severe air pollution.	Extreme energy dependence on imports; outdated infrastructure; high energy poverty.	Common challenge: legacy carbon-intensive systems weaken competitiveness and increase macroeconomic risks.
Energy System Characteristics	Over 70% fossil-fuel reliance; expanding renewables; first sovereign green bond.	Heavy reliance on lignite coal; slow but ongoing diversification; growing renewables.	>80% electricity historically from a single external source; now investing in PV and efficiency.	Moldova is most vulnerable; Romania and Bulgaria leverage EU regulatory pressure to accelerate transition.
Major Sustainability Reforms	Green Deal alignment, coal phase-out, renewable expansion, EV incentives, energy efficiency programs.	Climate mitigation strategy, building renovation, digitalization initiatives, energy-sector reforms.	Energy diversification (solar, interconnections), EMIS for 5,000 institutions, energy vulnerability fund.	All pursue energy resilience; Moldova exemplifies crisis-driven reforms; EU members follow structured EU pathways.
Social Sustainability Measures	Inclusive growth, human capital investments, regional development programs.	Emphasis on social inclusion, addressing inequality and demographic pressures.	EVRF reducing energy poverty (−18%) and total poverty among beneficiaries (−35%).	Social measures significantly enhance resilience and strengthen economic outcomes across all countries.
Economic Outcomes Linked to Sustainability	Evidence of growth–emissions decoupling; rising GDP alongside declining emissions.	Gradual reduction in energy intensity; growing green-job potential.	Reduced public energy expenditures; improved household welfare and macro stability.	Sustainability investments consistently generate measurable economic returns and welfare gains.

Resilience to Shocks	Enhanced energy security through diversification; fiscal–green reforms support stability.	Exposure to carbon price volatility; reforms aimed at reducing systemic risk.	Extreme shock exposure in 2021–2022; resilience increasing due to efficiency and diversification measures.	Sustainability directly strengthens resilience to climate, energy, and social shocks—core to economic well-being.
Institutional & Regulatory Drivers	Strong EU compliance mechanisms; access to substantial EU funds.	EU regulatory alignment; World Bank and IFC-supported transition frameworks.	EU candidate conditionality; UNDP & World Bank as primary institutional anchors.	EU membership or candidacy provides strong reform incentives and financial support.
Access to International Finance	Green bonds; EU structural funds; World Bank climate programs.	EU Just Transition Fund; IFC support for green investments.	EU grants, World Bank loans, UNDP financing for energy and resilience.	Sustainability performance increasingly conditions access to external financing.
Cost-Efficiency & Fiscal Impact	Savings from efficiency; reduced health and disaster costs.	Efficiency gains from renovations; fiscal risks from coal dependence.	Lower energy bills for public sector; reduced poverty-related fiscal pressures.	Investments in sustainability consistently reduce medium- and long-term public spending.
Overall Role of Sustainability in Economic Well-Being	Catalyst for long-term convergence, energy security, and competitiveness.	Pathway to modernizing the economy, reducing disparities, and improving public health.	Foundation for resilience, poverty reduction, and EU convergence.	Sustainability is a shared strategic route to stability, growth capacity, and improved welfare in all cases.

Source: *elaborated by the author.*

A first cross-country result highlights the structural vulnerability of all three economies to climate risks and carbon-intensive growth models. Romania remains heavily exposed to floods and droughts, with an emissions intensity approximately 2.5 times higher than the EU average, due largely to fossil-fuel dependence and legacy industrial processes. Bulgaria records one of the highest GHG intensities per GDP unit in the EU, stemming from lignite-based electricity production and energy-inefficient infrastructure. Moldova, though smaller in scale, exhibits an even greater systemic vulnerability due to its extreme dependence on imported energy, which exposed the economy to severe shocks during the 2021–2022 energy crisis, driving over 70% of households into energy poverty. These patterns reveal a shared structural challenge: *unsustainable energy systems and climate exposure weaken macroeconomic stability, depress productivity, and increase public spending on disaster response and health impacts.*

Despite differences in capacity, the three countries demonstrate a common shift toward green growth as a foundation for economic modernization. Romania and Bulgaria, operating within the EU regulatory framework, mobilize European Green Deal commitments to align structural reforms with ecological goals—phasing out coal, expanding renewable capacity, renovating the building stock, and modernizing transport systems. Romania's issuance of its first sovereign green bond marks an important milestone, signaling a fiscal commitment to low-carbon investments. Bulgaria's reforms increasingly emphasize energy efficiency, digitalization, and regional inclusion as core components of its green transition. Moldova—despite more limited resources—follows a parallel trajectory by prioritizing energy diversification, installation of photovoltaic systems in public institutions, and the development of a national Energy Management Information System to monitor and optimize consumption across more than 5,000 public buildings.

The empirical results show that *sustainability reforms are closely associated with measurable economic gains* across all three countries. Romania demonstrates evidence of economic–environmental decoupling: emissions have declined substantially from 1990 levels while GDP per capita has consistently increased. Bulgaria, after years of stagnation, is gradually reducing energy intensity and capturing efficiency gains from renewable installations and building retrofits. Moldova's targeted energy-efficiency interventions yield reductions of up to 32% in public institutions' consumption, lowering fiscal expenditures and enabling savings to be redirected to social priorities. Furthermore, Moldova's Energy Vulnerability Reduction Fund—an innovative mechanism combining sustainability with social protection—reduced energy poverty by 18% and overall poverty by 35% among beneficiaries, illustrating how well-designed sustainability policies generate direct and rapid improvements in household welfare.

Sustainability also strengthens resilience to external shocks, an increasingly critical factor in economic well-being. For Romania and Bulgaria, diversifying energy sources reduces exposure to volatility in international energy markets—a vulnerability accentuated by recent geopolitical and supply crises. Both countries show that strengthening renewable capacity not only advances climate objectives but also stabilizes energy costs for industry and households. Moldova's recent experience demonstrates the macro-critical role of sustainability: lacking renewable alternatives during the energy crisis resulted in near-systemic breakdown, while the subsequent push toward energy diversification is now viewed as essential for macroeconomic stability. Across all three countries, climate-smart agriculture, infrastructure adaptation, and disaster-risk management reduce losses from extreme weather events—losses which would otherwise translate into fiscal stress, lower productivity, and reduced household incomes. Thus, resilience emerges as one of the most robust economic dividends of sustainability.

The comparative analysis further reveals that social sustainability—education, healthcare, equality, and inclusive development—functions as a multiplier of economic returns. Romania and Bulgaria pursue inclusive growth strategies that integrate regional development, public-service expansion, and labor-force upskilling. These investments enhance productivity, expand the domestic market, and reduce structural inequalities that hinder economic convergence. Moldova's social protection reforms, particularly those linked to energy affordability, provide a compelling case study of how targeted social measures can stabilize consumption, protect human capital, and prevent deepening poverty during crises. Across the region, improvements in air quality, public health outcomes, and housing quality have direct implications for labor productivity and economic growth. This confirms the theoretical perspective advanced by scholars like Stiglitz and Sachs: economic performance is inseparable from social well-being and environmental stewardship (Stiglitz, 2018).

Cost-efficiency is another central result emerging from the analysis. Investments in energy efficiency, waste reduction, and cleaner production consistently produce economic returns by lowering operational costs and reducing public expenditures on energy, health, and disaster recovery. Romania and Bulgaria benefit from EU-funded building renovation programs that reduce heating expenses. Moldova's modernization of public institutions decreases fiscal burdens for local administrations. These findings align with international evidence suggesting that every dollar invested in climate adaptation or pollution control yields multiple dollars in avoided damages or savings—an effect observable across the three economies.

The three countries also share the benefit of expanded access to international finance conditioned by sustainability performance. EU funds, World Bank loans, and IMF's Resilience and Sustainability Trust increasingly prioritize green and inclusive investments. Romania and Bulgaria leverage substantial EU financing for renewable energy, digital transformation, and social cohesion, while Moldova accesses sizable support through UNDP, the World Bank, and EU assistance linked to accession reforms. This creates a reinforcing cycle: sustainability reforms increase investor confidence, which in turn increases access to financing, supporting additional reforms and growth.

Despite these shared benefits, the comparative perspective also highlights transitional challenges. All countries face trade-offs related to the costs of green infrastructure, workforce retraining, and subsidy reform. Emerging economies experience political and fiscal pressure to prioritize short-term consumption over long-term sustainability. However, the evidence across cases indicates that these trade-offs are less severe than assumed; in many instances, well-designed sustainability reforms provide immediate co-benefits, particularly in job creation (retrofit sectors, renewables, public infrastructure) and public health improvements. The emerging narrative in the region shifts away from the traditional dichotomy "environment versus economy" toward a more empirically grounded paradigm, namely: *a sustainable environment and equitable society are preconditions for durable economic prosperity.*

In sum, the integrated comparative analysis demonstrates that sustainability functions as a robust engine of economic well-being in emerging European economies. Across Romania, Bulgaria, and Moldova, investments in climate resilience, clean energy, human capital, and inclusive development produce demonstrable economic returns, enhance resilience, strengthen institutional capacity, and improve the quality of growth. The evidence suggests that sustainability is not merely compatible with economic development—it is, increasingly, the foundation upon which long-term, resilient, and inclusive economic progress depends.

Beyond the detailed cases above, other emerging economies in Europe echo similar patterns. Countries like Croatia (EU member since 2013) and candidate countries in the Western Balkans have recognized the importance of sustainable tourism, renewable energy potential, and preserving natural capital as part of their growth models. Poland, while more economically advanced, faces a sustainability turning point as it transitions from coal dependence to cleaner energy to ensure energy security and compliance with EU climate goals. Many Central and Eastern European countries have benefited from EU structural funds earmarked for green infrastructure and social development, which have improved waste management, water treatment, and rural development – all contributing to better health outcomes and job creation in local communities.

Across these varied contexts, a few common threads emerge: Investments in sustainability often yield multiple dividends – for example, improving insulation in homes not only saves energy costs (economic benefit) but also reduces greenhouse emissions (environmental benefit) and makes vulnerable households healthier and more comfortable (social benefit). Countries that proactively address environmental issues like air and water pollution find that they save on healthcare costs and enhance labor productivity due to a healthier workforce. The OECD and UNDP have documented cases in Eastern Europe where every dollar invested in pollution control or climate adaptation saves several dollars in avoided damages and health expenditures (OECD). Furthermore, the pursuit of SDGs has been linked with stronger institutions (SDG 16) and partnerships (SDG 17), which can create a more stable and attractive environment for investors, thereby boosting economic prospects.

However, the cases also underscore challenges. A sustainability transition requires upfront costs and policy commitment. Emerging economies often face budget constraints, and short-term political pressures can favor immediate gains over long-term investments. International support (from EU funds, World Bank loans, IMF programs like the Resilience and Sustainability Trust, etc.) thus plays a crucial role in easing the transition. The IMF's establishment of climate-focused facilities reflects the understanding that many middle-income countries need financial and technical help to build resilience and green their economies (IMF, 2025). In Europe, coordination at the EU level (such as NextGenerationEU recovery funds largely targeted at green and digital transitions) has provided a boost to countries like Romania and Bulgaria for sustainable investments.

In summary, the experience of emerging EU economies consistently shows that sustainability initiatives contribute positively to economic well-being by fostering long-term growth capacity, reducing

risks from shocks, and improving the quality of growth (making it more inclusive and resilient). These lessons inform the broader analysis and policy recommendations that follow.

The case studies and literature reviewed above reveal a clear message - *sustainability is a powerful driver of economic well-being and resilience* for emerging economies, rather than a drag on growth. The relationship manifests in several interrelated ways:

1. Long-Term Growth and Competitiveness.

Pursuing sustainability helps countries avoid the growth pitfalls that come from environmental depletion and social neglect. Romania's scenario of potentially tripling income by 2050 while cutting emissions demonstrates that climate action can coincide with robust growth (World Bank, 2025). By investing in clean energy and efficiency, economies reduce waste and often gain a competitive edge in emerging green industries. Early adopters of renewable technology can develop domestic industries (manufacturing of solar panels, wind turbines, etc.), creating jobs and export opportunities. Moreover, sustainable use of resources ensures that natural capital (forests, water, soil fertility) continues to support key sectors like agriculture, tourism, and energy in the future. Countries ignoring sustainability may enjoy short-term spurts of growth, but they risk hitting barriers such as resource scarcity, health crises from pollution, or international trade penalties for high carbon footprints. In essence, sustainability-oriented reforms expand an economy's productive potential and guard against future shocks, laying a stable foundation for growth.

2. Economic Resilience to Shocks.

One of the most tangible benefits of sustainability is increased resilience to economic shocks – be they climate-related or social. The IMF emphasizes that climate change is macro-critical because climate shocks (storms, droughts, floods) can derail budgets, output, and livelihoods (Eurostat, 2024). By investing in resilience – such as flood defenses, climate-smart agriculture, diversified energy sources – countries reduce the adverse economic impacts of such events. Moldova's experience during the energy crisis is illustrative: lacking sustainable energy alternatives nearly led to an economic and humanitarian disaster (OECD), whereas building renewable capacity and efficiency now is seen as a way to prevent similar crises and stabilize the economy. Social sustainability measures (like Moldova's EVRF or Bulgaria's social inclusion programs) also increase resilience by providing safety nets, maintaining consumer demand during downturns, and preventing social unrest. In the EU context, countries with stronger social support systems weathered the COVID-19 pandemic and energy price spike more robustly, preserving human capital and bouncing back faster. Thus, sustainability enhances resilience, which is a key component of economic well-being – a resilient economy can sustain and quickly resume growth despite external shocks.

3. Improved Social Outcomes Feeding into Economy.

Sustainability's social pillar – investments in education, health, equality – directly contributes to economic performance. A healthier, better-educated population is more productive and innovative. Reducing inequality (for instance, urban-rural divides or gender gaps) means a larger share of the population can contribute to and benefit from growth, creating a more robust domestic market and talent pool. We saw that in Bulgaria and Romania, the push for *inclusive* growth (through better public services and regional development) is paired with environmental initiatives (World Bank, 2024). The outcomes are mutually reinforcing: as rural areas get sustainable infrastructure (like clean energy or water) and social investment, they become more economically dynamic, which in turn broadens the national growth base. Joseph Stiglitz and other scholars argue that when we broaden our measures of progress to include well-being and sustainability, we actually create conditions for more stable and equitable economic expansion (Stiglitz, 2018). In emerging EU economies, aligning with EU social and environmental standards has often spurred reforms that strengthen institutions and governance (for example, better regulatory frameworks for environmental protection, or more transparent public spending on social programs), which improve the

overall business climate and investor confidence. Good governance is an intangible yet vital aspect of sustainability that boosts economic well-being by ensuring resources (natural and financial) are managed effectively for the public good.

4. Cost Savings and Efficiency Gains.

Many sustainable practices lead to efficiency gains that are economically beneficial. Energy efficiency means lower energy bills for industry and households, freeing up money for other productive uses. Cleaner production processes often reduce waste of raw materials. For emerging economies that are often more energy- or resource-intensive than their advanced counterparts, these gains can be substantial. The World Bank's Inclusive Green Growth report noted that environmentally harmful subsidies (for fossil fuels, etc.) can be reformed to both save fiscal resources and encourage innovation (World Bank,2012). We have examples such as the removal of energy subsidies combined with targeted support to the poor (as in Moldova's case) which improves fiscal sustainability while incentivizing energy savings (OECD). Similarly, protecting ecosystems can maintain services like water purification and flood control that, if lost, would impose huge artificial costs to replace. In dollar terms, a study might find that every 1% of GDP invested in climate adaptation saves more than 1% of GDP in avoided disaster losses – a net positive. Therefore, economically, sustainability often pays for itself and then some, through avoided costs and new efficiencies.

5. International Support and Market Access.

In today's world, a country's sustainability record can influence its economic opportunities. EU emerging economies have access to significant EU funds that are increasingly tied to green and inclusive objectives (e.g., recovery funds requiring a percentage to be spent on climate and digital priorities). Countries that lag on sustainability may miss out on such support or face conditions (as we see with some coal-dependent regions required to draft transition plans to receive aid). Moreover, global investors are paying more attention to Environmental, Social, and Governance (ESG) factors. A reputation for sustainable development can attract foreign investment and integration into European value chains (for instance, factories that meet EU environmental standards). Conversely, heavy polluters may face carbon border taxes or divestment. Thus, emerging economies that proactively embrace sustainability can improve their access to finance and markets, further boosting economic prospects. The IMF's creation of the Resilience and Sustainability Trust is a case in point – countries implementing climate reforms can receive long-term low-interest financing (IMF, 2025). This reflects a broader trend where sustainability is becoming synonymous with sound economic management in the eyes of international partners.

In discussion, it is important to acknowledge that the transition to sustainable practices poses short-term challenges. Initial costs for green infrastructure, the need to retrain workers from sunset industries, and reforming subsidies can encounter political resistance. Emerging EU economies often must strike a balance between short-term growth objectives and long-term sustainability goals. Yet, as the evidence indicates, the trade-off is often less severe than feared. In fact, many reforms can be designed to yield short-term co-benefits (jobs in construction for green projects, immediate health improvements from pollution control) while setting up the economy for future gains. The narrative is shifting from "environment versus economy" to "environment for the economy" – recognizing that a healthy environment and equitable society form the backbone of a durable economy.

Policy Recommendations

Drawing on the analysis of emerging economies in the EU and Moldova, we propose several policy recommendations for governments and stakeholders to leverage sustainability as a driver of economic well-being:



Fig.1.2. Policy recommendations for governments and stakeholders to leverage.
Source: *Elaborated by the author based on (World Bank, 2012, 2023, 2024, 2025).*

1. Governments should explicitly incorporate sustainable development goals into their economic planning. This means setting targets beyond GDP – such as targets for greenhouse gas reduction, renewable energy share, education outcomes, and inequality reduction – and monitoring them alongside traditional economic indicators. By doing so, policy trade-offs become more transparent, and progress in social and environmental dimensions is given due weight. For example, adopting **"**green GDP" or adjusted savings metrics can help policymakers ensure that natural resource depletion or pollution costs are not ignored in economic decisions (Stiglitz, 2018)). Countries like Romania and Bulgaria, which have developed Green Growth strategies with World Bank assistance, serve as models in aligning national plans with sustainability benchmarks (World Bank, 2023, 2024).

2. Emerging EU economies and candidates should maximize the use of available funds (EU structural funds, NextGenerationEU recovery grants, World Bank loans, etc.) to finance sustainability projects. Priority areas include renewable energy infrastructure (solar, wind farms, grid upgrades), energy efficiency programs (building retrofits, efficient district heating), sustainable transportation (public transit, rail, electric vehicle charging), and climate adaptation measures (flood defenses, drought-resistant agriculture). These are capital-intensive but yield long-term payoffs. International institutions are increasingly earmarking funds for such purposes – as seen with the World Bank's loans for green growth and fiscal reforms in Romania and the IMF's climate finance tools. Governments should ensure they have "shovel-ready" sustainable projects and the absorptive capacity to effectively use these funds. Technical assistance from institutions can help in project design and in strengthening institutions to implement complex multi-sector reforms (e.g., energy market reforms coupled with social protection enhancements).

3. Introducing a carbon price (through carbon taxes or cap-and-trade systems) can be a powerful policy to drive sustainability by internalizing environmental costs. It encourages businesses and consumers to adopt cleaner technologies, and it can generate revenue that governments can reinvest in green projects or use to compensate households. Joseph Stiglitz and others advocate for carbon pricing as a tool to align market incentives with sustainability, noting it can spur innovation and investment in green sectors (Stiglitz, 2016). At the same time, phasing out subsidies that encourage fossil fuel use or other environmental harm is crucial. Bulgaria and Moldova, for instance, have historically subsidized energy prices – moving away from this (while protecting the poor with targeted aid) will improve fiscal positions and encourage energy saving (OECD). Any carbon pricing scheme should be designed progressively, where part of the revenue supports low-income households and workers in affected industries (just transition measures), ensuring political and social feasibility.

4. Governments should create an enabling environment for the private sector to invest in sustainability. This can include public-private partnership frameworks for large infrastructure (renewable energy parks, smart grids, waste management systems), financial incentives like green bonds or tax credits for clean technology, and clear long-term signals (such as commitments to phase out coal by a certain date or mandates for utilities to purchase renewable power). The World Bank and IFC's involvement in Bulgaria highlights the importance of mobilizing private capital for green (World Bank, 2024). By de-risking investments (through guarantees or blended finance), governments can attract businesses into sectors like

sustainable agriculture supply chains, eco-tourism, or green manufacturing. Additionally, supporting small and medium enterprises (SMEs) with green innovation grants and simplifying regulations for renewable energy installations can unleash entrepreneurial activity in sustainability fields. The private sector's innovation and efficiency are essential for scaling sustainable solutions and creating green jobs.

5. Sustainability policies must go hand-in-hand with strong social policies to ensure the benefits of growth are widely shared and to support those adversely affected. For example, if coal mines are closed for climate goals, there should be programs for reskilling workers and developing alternative industries in those regions. Investment in education and vocational training in emerging sectors (renewable energy technicians, energy auditors, environmental engineers) is needed to build a workforce for the green economy.Strengthening social safety nets (unemployment benefits, cash transfers) helps maintain well-being during structural changes. Moldova's example of combining energy reform with direct support to vulnerable households (EVRF) is instructive – it prevented a sharp rise in poverty while encouraging efficient energy use (OECD). More broadly, policies like universal health coverage and improved rural services enhance human capital and allow everyone to participate in growth. An inclusive approach not only upholds social justice but also keeps the public consensus in favor of sustainability transitions.

6. Sustainability challenges such as climate change and sustainable finance often transcend national borders. Emerging European economies should actively engage in regional initiatives – for instance, the EU's mechanisms for just transition, or cross-border renewable energy projects (like grid interconnections in the Baltic or Black Sea regions). Sharing best practices through EU networks or OECD programs can help countries leapfrog to effective solutions. International cooperation also means aligning with global goals like the Paris Climate Agreement and Agenda 2030 (SDGs), which can unlock technical support and maintain policy credibility. Given that many emerging EU economies are on the path to EU accession or deeper integration, adhering to these frameworks is strategically beneficial. Additionally, cooperation with neighbors on issues like transboundary water management or energy trade can yield mutual economic and sustainability benefits (e.g., Moldova integrating with the EU electricity grid improves its energy security and economic ties).

By implementing these policy recommendations, emerging economies in Europe can better harness sustainability as an engine of economic well-being. The recommendations recognize that government leadership is vital but also that whole-of-society engagement – including businesses, civil society, and international partners – is necessary to drive the comprehensive change needed. Importantly, policies should be evidence-based and monitored: governments ought to track progress with indicators (for example, reporting on SDGs domestically) and adjust strategies as needed. The credible institutions cited in this article (World Bank, IMF, UNDP, OECD, Eurostat) provide data and guidance that policymakers can use to design and refine these interventions.

CONCLUSIONS

This study has examined the role of sustainability as a driver of economic well-being in emerging European economies, focusing on Romania, Bulgaria, Moldova, and comparable cases. The evidence from literature and case analyses strongly indicates that integrating sustainability – across economic, social, and environmental dimensions – bolsters long-term prosperity and resilience. Rather than viewing sustainability measures as a constraint or cost to emerging economies, the experience of these countries suggests such measures are investments in future growth and stability. Sustainable practices mitigate the risks that can undermine economies (like climate disasters or social unrest), and they open opportunities for innovation, efficiency, and improved human capital.

In Romania and Bulgaria, we observed national strategies that link green transitions with inclusive growth, supported by international financing, which are expected to accelerate EU convergence and improve

quality of life. Moldova's case highlighted the immediate impacts of sustainability-oriented policy: how addressing an energy crisis with sustainable solutions not only kept the lights on but also reduced poverty and vulnerability. These examples reinforce the theoretical arguments of scholars like Stiglitz and Sachs that economic performance must be judged on more than short-term output – it must include wellbeing and sustainability. Indeed, our analysis suggests that countries which proactively embrace sustainable development paradigms tend to create more robust economies that can deliver broad-based improvements in living standards.

Looking ahead, emerging economies in the EU and beyond are likely to face continued pressures: climate change will intensify, technology will reshape labor markets, and citizens will demand equitable growth. Sustainability provides a unifying framework to tackle these pressures – by promoting a shift to low-carbon and circular economic models, by investing in people's capabilities and health, and by strengthening the institutions that manage resources and distribute gains. The transition is complex and not without obstacles; it requires prudent policy design, social dialogue to manage changes, and international solidarity (as richer countries and institutions support poorer ones). However, the cost of inaction – in foregone growth, disaster damages, and human hardship – would be far greater.

In conclusion, sustainability should be viewed as integral to the development strategy of emerging economies, not a secondary concern. It drives economic well-being by ensuring that growth today does not compromise growth tomorrow, and by directly improving the lived experience of people through cleaner air, better jobs, and social inclusion. Policymakers in emerging European countries are increasingly recognizing this and moving in the right direction, aligning with EU initiatives and global goals. As they continue on this path, ongoing assessment and research will be needed to fine-tune policies and share successes. The findings of this article affirm that when sustainability is put at the center of economic planning, it acts as a powerful engine for enduring prosperity and resilience – a lesson that is highly relevant for all countries navigating the challenges of the 21st century.

REFERENCES

1. Eurostat (2024). *EU SDGs Monitoring Report – News Release.* Available online:https://ec.europa.euec.europa.eu, (accessed on 24 September).
2. IMF (2025). *Climate Change and the IMF – Policy Statement.* Available online:https://imf.org, (accessed on 14 September).
3. OECD/European Environment Agency reports on Bulgaria's energy intensityeea.europa.eu and World Bank/UNDP data on Moldova's energy poverty. Available online:https://undp.org, (accessed on 30 September).
4. Sachs, J. (2023). Interview on sustainable development (Webuild). Available online:https://jeffsachs.orgjeffsachs.org, (accessed on 02 October)
5. Stiglitz, J. (2016). *Sustainable and Inclusive Growth in Emerging Markets.* Available online:https://business.columbia.edu, (accessed on 24 September).
6. Stiglitz, J. (2018). "Beyond GDP" – *Project Syndicate Commentary.* Available online:https://project-syndicate.org, (accessed on 11 October).
7. UNDP Moldova (2025). *Energy Transformation for Inclusion and Economic Opportunities – News Article.* Available online:https://undp.orgundp.org, (accessed on 16 October).
8. World Bank (2012). *Inclusive Green Growth: The Pathway to Sustainable Development.* Available online:https://documents.worldbank.org, (accessed on 18 October).
9. World Bank (2023). *Romania Country Climate and Development Report – Press Release.* Available online:https://worldbank.org, (accessed on 18 October).
10. World Bank (2024). *Bulgaria Country Partnership Framework FY25-29 – Press Release.* Available online:https://worldbank.org, (accessed on 18 October).
11. World Bank (2024). *Romania Fiscal Management and Green Growth Development Policy Loan – Press Release.* Available online:https://worldbank.org, (accessed on 18 October).
12. World Bank (2025). *Moldova Country Overview* (April 2025 update)worldbank.org, (accessed on 18 October).