

**Ministry of Education and Science of Ukraine
Sumy State University
Kaunas University of Technology, School of
Economics and Business
University of Bradford, School of Management
Riga Technical University
Czech University of Life Sciences Prague
University of New Brunswick
International Centre for Enterprise and Sustainable**



"ECONOMICS FOR ECOLOGY"

*("EU practices of education for sustainable
development")*

*Materials
International scientific-practical conference
(Ukraine, Sumy, May14–17, 2024)*

*Sumy
Sumy State University
2024*

УДК: 330.15:502/504
Авторський знак: S70

The conference is held within the Jean Monnet Modules “Fostering EU Practices of Education for Sustainable Development through the Brand Language: Interdisciplinary Studies” (101085708-ESDbrandEU-ERASMUS-JMO-2022-HEI-TCH-RSCH), Jean Monnet Module “Youth and Business: EU Practices for Cooperation” (101126538 — YouthBEU — ERASMUS-JMO-2023-HEI-TCH-RSCH) (2023-2026) and “Disruptive technologies for sustainable development in conditions of Industries 4.0 and 5.0: the EU Experience (101083435 — DTSDI — ERASMUS-JMO-2022-HEI-TCH-RSCH)”



Co-funded by
the European Union

Editor-in-Chief Prof., Dr. Oleksandra Karintseva, head of the economics, entrepreneurship and business administration, Sumy State University

Approved by the Academic Council of SSI BIEM of Sumy State University
(protocol №2, 5 September 2024)

Economics for Ecology : Proceedings of the International Scientific and Practical Conference, Sumy, May 14–17, 2024 / edited by Karintseva Oleksandra and Kubatko Oleksandr . – Sumy : Sumy State University, 2024 – 103 p. (*electronic edition*)

For scientists, scientists, students, graduate students, representatives of business and public organizations and higher education institutions and a wide range of readers.

TABLE OF CONTENTS

<i>Yevhen Mishenin, Inessa Yarova</i>	FACILITATION IN THE MANAGEMENT OF SUSTAINABLE SPATIAL DEVELOPMENT OF FORESTRY	6
<i>Yevhen Mishenin, Inessa Yarova</i>	ENVIRONMENTAL TAXATION IN THE SYSTEM OF SOCIO-ECOLOGICAL AND ECONOMIC SECURITY	8
<i>Konoplenko Andrii</i>	ANALYSIS OF THE IT OUTSOURCING MARKET: TRENDS AND FORECASTS	11
<i>Wenyan Liu</i>	A CITATION AND PUBLICATION PERFORMANCE ANALYSIS ON INNOVATION, BUSINESS AND DIGITALISATION	13
<i>Vladyslav Piven, Oleksadra Karintseva</i>	THE IMPACT OF DEMOCRACY ON SUSTAINABLE DEVELOPMENT: A CASE OF THE EU	15
<i>Raminta Vaitiekuniene, Kristina Sutiene, Rytis Krusinskas, Bohdan Kovalov</i>	FINANCIAL AND INNOVATION PERFORMANCE OF THE COMPANIES IN THE CONTEXT OF GREEN DEAL TARGETS	17
<i>Artem Borukha, Oleksandr Kubatko</i>	DISRUPTIVE TECHNOLOGIES TO ENSURE ECONOMIC AND RESOURCE SECURITY OF UKRAINE	21
<i>Iryna Burlakova, Anastasiya Kuzchenko, Zumrut Alic</i>	THEORETICAL AND INSTITUTIONAL FOUNDATIONS OF SOCIAL SOLIDARITY ECONOMY	23
<i>Chang Shengchun</i>	THE IMPACT OF THE DIGITAL ECONOMY ON CARBON REDUCTION POTENTIAL	25
<i>Mykhailo Chortok</i>	THE ROLE OF SOCIAL SOLIDARITY ECONOMY FOR SUSTAINABLE DEVELOPMENT ESTABLISHING	29
<i>Yuliia Chortok, Solodovnyk O.</i>	FAIR-TRADE AS A TREND FOR SOCIAL SOLIDARITY ECONOMY DEVELOPMENT	31
<i>Du Shutong</i>	ESG POLICY IN BANKING AND FINANCES SECTOR: CASES OF EUROPEAN COMPANIES	33
<i>Gawel Solowski</i>	MICROBIAL HYDROGEN PRODUCTION'S RECENT ACHIEVEMENTS	35
<i>Inna Koblianska</i>	TOWARDS PROACTIVE POLICY: A FRAMEWORK FOR SAFE AND SUSTAINABLE FERTILISER MANAGEMENT	42

<i>Yuliia Lukianova</i>	PACKAGE LABELING AND SUSTAINABLE DEVELOPMENT	45
<i>Helena E. Myeya</i>	STAKEHOLDERS' ROLE IN IMPROVING SMALLHOLDER FARMERS' RESILIENCE TO CLIMATE CHANGE EFFECTS IN CENTRAL, TANZANIA	49
<i>Anna Shcherbak, Olena Nazarenko</i>	PROJECT-BASED LEARNING AS A METHOD OF FOREIGN LANGUAGE TEACHING	53
<i>Iryna Sotnyk, Maryna Nikulina</i>	STRATEGIC MANAGEMENT IN SMALL IT BUSINESS SECTOR	55
<i>Oleksandra Pavliv</i>	VIRTUAL EXCHANGE PRACTICE AS A PROCESS OF DEVELOPING SOCIOCULTURAL COMPETENCE	57
<i>Vladyslav Piven, Oleksandr Kubatko</i>	ECONOMIC GROWTH AND SUSTAINABLE DEVELOPMENT: THEORETICAL ANALYSIS OF KEY FACTORS	59
<i>Tetyana Sakhnenko, Viacheslav Voronenko</i>	STIMULATING BIOGAS PRODUCTION: ECONOMIC JUSTIFICATION	61
<i>Iryna Sotnyk</i>	DEVELOPMENT OF REMOTE EMPLOYMENT AS A RESPONSE TO MODERN SOCIAL CHALLENGES IN UKRAINE	64
<i>Iryna Sotnyk, Jan-Philipp Sasse, Evelina Trutnevyte</i>	SHAPING THE DECARBONIZED FUTURE OF THE ELECTRICITY INDUSTRY IN UKRAINE	66
<i>Iryna Sotnyk, Tetiana Kurbatova</i>	COST-EFFICIENT AND GREEN: TRANSFORMING HOUSEHOLD HEATING IN UKRAINE FOR A SUSTAINABLE FUTURE	70
<i>Iryna Ushchapovska</i>	FROM THE LANGUAGE THAT SUSTAINS TO THE LANGUAGE OF SUSTAINABLE DEVELOPMENT	73
<i>Vnuchkova Viktoriia, Chulanova Halyna</i>	GAMIFYING SUSTAINABILITY EDUCATION FOR CULTURALLY DIVERSE CLASSROOMS	76
<i>Wang Fujin</i>	KEY ELEMENTS OF SUCCESSFUL ESG POLICY: EUROPEAN EXPERIENCE	79
<i>Wang Yimeng</i>	THE IMPACT OF DIGITAL ECONOMY ON THE EFFICIENCY OF GREEN TRANSFORMATION IN CHINESE CITIES	81
<i>Kostiantyn Zavrazhnyi, Anzhelika Kulyk</i>	HARNESSING GENERATIVE ARTIFICIAL INTELLIGENCE FOR SUSTAINABLE BUSINESS TRANSFORMATION	84

<i>Amina Gura, Oleksandra Kubatko</i>	FUNCTIONING OF THE ENTERPRISE IN THE CONDITIONS OF WAR: SOCIO-ECONOMIC, ENERGY AND ENVIRONMENTAL CONSEQUENCES	87
<i>Ding Lin, Oleksandra Kubatko</i>	ECONOMIC, ECOLOGICAL AND RENEWABLE ENERGY ASPECTS OF PETROCHINA COMPANY ACTIVITY	90
<i>Tetyana Sakhnenko, Oleksandr Ponomarenko, Oleksandr Kubatko</i>	RESTRUCTURING OF ECONOMIC SYSTEMS IN THE DIRECTION OF ENSURING SUSTAINABLE DEVELOPMENT	94
<i>Jerzy Gilarowski</i>	TOURISM AS A WAY OF DEVELOPMENT AND INTEGRATION OF SUB-SAHARAN AFRICA	96
<i>Ponomarenko Ihor</i>	ECOLOGICAL TRANSFORMATION: CURRENT TRENDS IN THE IMPLEMENTATION OF GREEN TECHNOLOGIES	98
<i>Pavlo Hrytsenko, Tao Senlin</i>	THE ROLE OF VIRTUAL BUSINESS ENVIRONMENTS IN "GREEN ECONOMY" ENTITIES	101

ECONOMIC GROWTH AND SUSTAINABLE DEVELOPMENT: THEORETICAL ANALYSIS OF KEY FACTORS

*Vladyslav Piven, student,
Sumy State University, Ukraine*
*Oleksandr Kubatko, Dr. (Economics), Professor
Sumy State University, Ukraine*

Sustainable development ensures the long-term viability of the planet and the preservation of its resources for future generations. By applying sustainable practices, it is possible to mitigate eco-destructive impacts on the environment, preserve biodiversity and combat climate change, protecting the health of ecosystems and the well-being of communities [1]. In addition, sustainable development promotes economic stability and resilience by encouraging innovation, resource efficiency and social justice, which are the foundations of a more prosperous and just society.

Classical economic growth focuses primarily on increasing production and consumption without considering the long-term impact on the environment and society. In contrast, sustainable (green) economic growth emphasizes the integration of environmental, social and economic factors so that development meets the needs of the present without compromising the ability of future generations to meet their own needs [2]. This involves prioritizing renewable resources, minimizing pollution and waste (in particular through the implementation of circular production principles), and promoting social justice.

Due to the complexity of socio-economic systems, understanding the key factors affecting sustainable economic growth has been and still is one of the main challenges for the scientific community. With the evolution of scientific thought, the approaches to determining the drivers of traditional economic growth also changed. Neoclassical economic theory is one of the most recognized among scientists. It emphasizes the role of capital and labor as input variables in models of production growth, which is reflected in the Cobb-Douglas production function. New theories of growth are endogenous and emphasize the role of technological progress in economic development [3]. Our research on the factors of sustainable growth will expand the neoclassical model of production by adding new factors, including digital and energy factors, as they play a significant role in the performance of the national economy and the transition to sustainable development.

The issue of classical economic growth is the object of research by many scientific schools (classical school, neoclassical, Keynesians, etc.), which have different approaches to its assessment and analysis. The concept of sustainable economic growth was reflected in the works of J. Hickel, G. Kallis, M. Jacobs, S. Derkon, T. Hansen, and others. However, the modern scientific discourse lacks a synergistic approach to the issue of sustainable growth, which must take into

account economic, social and ecological components. Thus, the significant actuality of the mentioned topic, its theoretical and practical significance determined the choice of the topic of the work.

There are many approaches to define the concept of sustainable economic growth. One of them is that sustainable economic growth is a long-term development strategy aimed at achieving a harmonious balance between economic expansion, environmental protection and social welfare [4]. The key factors of sustainable economic growth are innovation and efficient use of resources. In addition, some works point to the importance of global cooperation and policies aimed at supporting entrepreneurship to achieve sustainable economic growth. Some sources emphasize the importance of openness and competition in markets as the main incentives for sustainable development.

Recommendations are provided to public authorities and other stakeholders on accelerating the transition to sustainable growth. For example, the government should promote renewable energy sources through financial and non-financial incentives. In some cases, it may be useful to consider carbon pricing mechanisms, such as carbon taxes or cap-and-trade systems. In addition, by introducing green financing instruments (such as green bonds) into renewable energy projects and other environmentally sustainable initiatives, more opportunities can be created for their successful implementation. Public authorities must transform most public services (obtaining permits, licenses or documents) to make them available online.

A key finding of this abstract is that there are a variety of factors that influence sustainable economic growth and, accordingly, policymakers should use different tools (including the above) to promote it. Further research should focus on the analysis of the role of regional disparities in economic growth (for example, using spatial econometric methods).

Acknowledgment. *This research was funded by a grant “Restructuring of the national economy in the direction of digital transformations for sustainable development” (№0122U001232) from National Research Foundation*

References

1. Keeys, LA, & Huemann, M. (2017). Project benefits co-creation: Shaping sustainable development benefits. *International Journal of Project Management*, 35(6), 1196-1212.
2. Stjepanović, S., Tomić, D., & Škare, M. (2017). A new approach to measuring green GDP: a cross-country analysis. *Entrepreneurship and sustainability issues*, 4, 574-590.
3. Dolderer, J., Felber, C., & Teitscheid, P. (2021). From neoclassical economics to common good economics. *Sustainability*, 13(4), 2093.
4. Said, R., Bhatti, MI, & Hunjra, AI (2022). Toward Understanding Renewable Energy and Sustainable Development in Developing and Developed Economies: A Review. *Energies*, 15(15), 5349.