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TABLE OF CONTENTS

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

Yuliia Lukianova	PACKAGE LABELING AND SUSTAINABLE DEVELOPMENT	45
Helena E. Myeya	STAKEHOLDERS' ROLE IN IMPROVING	49
Heiena E. Myeya	SMALLHOLDER FARMERS' RESILIENCE TO	77
	CLIMATE CHANGE EFFECTS IN CENTRAL,	
	TANZANIA	
Anna Shcherbak,	PROJECT-BASED LEARNING AS A METHOD	53
Olena Nazarenko	OF FOREIGN LANGUAGE TEACHING	33
	STRATEGIC MANAGEMENT IN SMALL IT	55
Iryna Sotnyk,	BUSINESS SECTOR	33
Maryna Nikulina Oleksandra Pavliv	VIRTUAL EXCHANGE PRACTICE AS A	57
Oleksanara Pavliv		31
	PROCESS OF DEVELOPING SOCIOCULTURAL COMPETENCE	
171 - 1 - 1 D:		59
Vladyslav Piven,	ECONOMIC GROWTH AND SUSTAINABLE	39
Oleksandr Kubatko	DEVELOPMENT: THEORETICAL ANALYSIS OF	
T . C 11 1	KEY FACTORS	<i>C</i> 1
Tetyana Sakhnenko,	STIMULATING BIOGAS PRODUCTION:	61
Viacheslav	ECONOMIC JUSTIFICATION	
Voronenko		
Iryna Sotnyk	DEVELOPMENT OF REMOTE EMPLOYMENT	64
	AS A RESPONSE TO MODERN SOCIAL	
	CHALLENGES IN UKRAINE	
Iryna Sotnyk,	SHAPING THE DECARBONIZED FUTURE OF	66
Jan-Philipp Sasse,	THE ELECTRICITY INDUSTRY IN UKRAINE	
Evelina Trutnevyte		
Iryna Sotnyk,	COST-EFFICIENT AND GREEN:	70
Tetiana Kurbatova	TRANSFORMING HOUSEHOLD HEATING IN	
	UKRAINE FOR A SUSTAINABLE FUTURE	
Iryna Ushchapovska	FROM THE LANGUAGE THAT SUSTAINS TO	73
	THE LANGUAGE OF SUSTAINABLE	
	DEVELOPMENT	
Vnuchkova	GAMIFYING SUSTAINABILITY EDUCATION	76
Viktoriia,	FOR CULTURALLY DIVERSE CLASSROOMS	
Chulanova Halyna		
Wang Fujin	KEY ELEMENTS OF SUCCESSFUL ESG	79
	POLICY: EUROPEAN EXPERIENCE	
Wang Yimeng	THE IMPACT OF DIGITAL ECONOMY ON THE	81
	EFFICIENCY OF GREEN TRANSFORMATION	
	IN CHINESE CITIES	
Kostiantyn	HARNESSING GENERATIVE ARTIFICIAL	84
Zavrazhnyi,	INTELLIGENCE FOR SUSTAINABLE BUSINESS	
Anzhelika Kulyk	TRANSFORMATION	

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

RESTRUCTURING OF ECONOMIC SYSTEMS IN THE DIRECTION OF ENSURING SUSTAINABLE DEVELOPMENT

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From the announcement the concepts of sustainable development, especially after receiving independence Ukraine was actively involved in the process support and implementation given concepts into life. After carrying out conference in Rio de Janeiro, started an activation of soecific actions related to implementation ideas sustainable development in Ukraine. At first support ideas and principles of sustainable development took place at local levels through activity of non-governmental and public organizations. The process itself was not systematic and his activity was not small national coverage, however exactly thanks to hereby non-state organizations there was happening educational activities and familiarization population with ideas sustainable development.

If we talk about the problems of ensuring sustainable development at the level of regions, then we understand the socio-ecological-economic contradictions of social development that arise in the process of economic activity in specific territories. The main problems of ensuring the sustainable development of the regions of Ukraine depending on the sphere of their manifestation could be divided into three groups:

Economic nature: presence of significant socio-economic losses from environmental pollution; environmentally destructive activities of business entities; significant wear and tear of production assets; low efficiency of the economic mechanisms for providing SD;

Of a social nature: from the growth of ecologically caused morbidity of the population; territorial differences in the quality of life of the population according to ecological and economic indicators; low effectiveness of public organizations in providing SD;

Environmental nature: increase in the number of emissions of harmful substances; reduction of biodiversity; rapid depletion of non-renewable natural resources.

Considering the complex economic, social and environmental problems faced by Ukrainian society in the conditions of a transitive economy, it is worth noting that they need to be solved simultaneously, without setting one or another preferential direction, depending on the degree of urgency of solving the problem. Postponing the solution of environmental problems and giving socio-economic development more advantages may lead to the fact that in the future all market

transformations and innovations may not be needed by anyone. A country that does not solve its environmental problems in the necessary way has no future, just as harmonious physical and spiritual development of a person in conditions of polluted air, water, and food is not possible.

Today, sustainable development is ensured by new achievements in social life, such as: horizontal distributed energy / digital networks, promotion of social economy, sustainable transportation systems, convergence technological processes, electrification of transport, cyberization of production, systematization of public institutions. The energy sector, in which 2/3 of the processes of harmful impact on the environment are generated, is a key area of solving the problems of sustainable transportation of the economy. Sustainable transportation of the energy complex is possible only if adequate transformations of the socio-economic system are carried out [1; 2]. The specified restructuring factors are called to improve the sustainable development of the energy system and start in general, achieving a general synergistic effect. The transition to renewable/alternative energy systems requires constant work and improvements.

The results of the conducted research allowed us to conclude that the need to implement the concept of sustainable development is determined by those prerequisites that have developed in modern business conditions. Among the main factors prompting a change in the forms of management can be named: the prevalence of the philosophy of consumption; demographic problems (reduction of population, also due to the war and migration) and deterioration of population health due to pollution; the predominance of the use of resource-destroying technologies in conditions of climate change; a decrease in biodiversity in nature, the emergence of new types of diseases; deterioration of food quality.

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References

- 1. Melnyk, L., Kovalov, B., Karintseva, O., Kubatko, O., & Tarasov, V. (2024). Systemic socio-economic essence of sustainable transportation of energy. Economics of Systems Development, 6(1), 11-23. https://doi.org/10.32782/2707-8019/2024-1-2.
- 2. Current trends of economic development. Book 1: Transformation of economic systems: Lessons of EU in Industries 3.0, 4.0, 5.0 Implementation : A study guide / Edited by Dr., Prof. Leonid Melnyk. Sumy : University Book, 2022. 608 p. https://essuir.sumdu.edu.ua/handle/123456789/91526