I WYZWANIA

WSPÓŁCZESNE TRENDY

# WSPÓŁCZESNE TRENDY I WYZWANIA PRZEDSIĘBIORCZOŚCI, BEZPIECZEŃSTWA I LOGISTYKI

Edukacja oraz B+R jako polski towar eksportowy

# WSPÓŁCZESNE TRENDY I WYZWANIA PRZEDSIĘBIORCZOŚCI, BEZPIECZEŃSTWA I LOGISTYKI

## Edukacja oraz B+R jako polski towar eksportowy

Redakcja naukowa Sylwia Skrzypek-Ahmed, Tomasz Wołowiec

#### LUBELSKA AKADEMIA WSEI

#### Seria wydawnicza: Monografie Wydziału Administracji i Nauk Społecznych

#### WSPÓŁCZESNE TRENDY I WYZWANIA PRZEDSIĘBIORCZOŚCI, BEZPIECZEŃSTWA I LOGISTYKI Edukacja oraz B+R jako polski towar eksportowy

Redakcja naukowa: dr Sylwia Skrzypek-Ahmed prof. Akademii WSEI, MBA ORCID: 0000-0002-1211-0683 dr hab. Tomasz Wołowiec prof. Akademii WSEI ORCID: 0000-0002-7688-4231

> Recenzenci: dr hab. Adam Szafarczyk dr hab. Agnieszka Kister

> > Korekta: Teresa Markowska

Skład, łamanie: Marta Krysińska-Kudlak

> Projekt okładki: Patrycja Kaczmarek

Grafika na okładce: Freepik.com

@Copyright by Innovatio Press, Lublin 2024

Wszelkie prawa zastrzeżone. W sprawie kopiowania lub rozpowszechniania fragmentów albo całości niniejszej pracy należy kontaktować się z wydawcą.

Printed in Poland
Innovatio Press Wydawnictwo Naukowe
Lubelskiej Akademii WSEI
20-209 Lublin, ul. Projektowa 4
tel.: +48 81 749 17 77, fax: +48 81 749 32 13
www.wsei.lublin.pl

ISBN – wersja elektroniczna: 978-83-67550-21-5

### SPIS TREŚCI

Wstęp	. 23
Tomasz Wołowiec, Sylwia Skrzypek-Ahmed, Paul Vincent, Haruna Muhammad Awwal	
Research on stimulating entrepreneurship by LGU's and their analysis	. 27
Introduction	28
Local business development factors	30
The level of fiscalism in the field of real estate tax	
and the increase in the number of new companies	34
Impact of taxation on local business development	40
Social and economic development of the commune in the context of the level	Ĺ
of own tax revenues	44
Development of local entrepreneurship from the perspective of various	
support instruments - financial and non-financial	48
Conlusions	51
Bibliography	52
Sylwia Skrzypek-Ahmed, Andrzej Gwiżdż, Nghargbu K'tso, Jerzy Gilarowski	
Evolution of the process management concept in an organisation including	
quality systems (selected problems)	
Introduction	
The concept and essence of the process	
Process management concept development	
Conclusions	
Bibliography	64
Chukwunonso Etal, Andrzej Gwiżdż, Diana Ismailova, Emanuel Józefacki,	
Magdalena Gawrońska	
The processes innovation model	
Introduction	
Stages of the innovation design management cycle	
Life cycle of process innovations	70
Methodology for implementing process management	70
Process design	
Functional management and process management	
Conclusions	77
Bibliography	77

Sylwia Skrzypek-Ahmed, Artem Artyukhov, Artur Kornatka, Hannatu Umar, Magda Ahmed	
Innovation as a stimulant for economic growth and economic	
competitiveness	79
Introduction	
Innovation at the company level	
Definitions of innovation in the world literature and types of innovation	
Conclusions	
Bibliography	
8 1 7	
Sylwia Skrzypek-Ahmed, Andah Ruth A., Indira Karibayeva, Krzysztof Dyrek,	
Marcin Szkudlarek	
Innovation activity as a process of uncertainty	96
Introduction	97
Innovation in a multidimensional perspective	98
Innovation activity as an economic and social process	100
R&D as a specific type of innovative activity	101
Types of innovation activity by time factor	103
Innovative company	106
An innovation active company and the gradation of innovativeness	107
Diffusion of innovation and degree of novelty	
Conclusions	110
Bibliography	112
Magda Ahmed, Iwona Kawka, Gbenga Ibileye, Bashir Adewale Adeniyi, Usman Alhaji Yusuf, Tomasz Połomski	
Change management in the implementation of new products	114
Introduction	115
How to implement change – change management in practice	
Implementation of new services as a change in the organization	
Stages of adaptation to change	121
Rules for making changes	121
Professional management of implementation of new products / services	
on an individual level	122
Conclusions	125
Advantages of the customer relationship building process	127
Bibliography	130
Ruth Andah	
Effect of social entreprenuership on community development in Pyakasa	
Settlement Abuja Municipal – Area Council, Federal Capital, Territory Nigeria	133
Introduction	
Literature review	

#### Spis treści

Conceptual review – Social entrepreneurship concepts	138
Empirical review	
Theoretical review	142
Methodology	143
Results and discussion	145
Descriptive statistics	145
Ordinal regression results	147
Model fit for ordinal logistics regression analysis	149
Discussion of findings	150
Conclusion and recommendations	
Bibliography	152
Piotr Zawada, Maciej Chrzanowski	
Wykorzystanie narzędzi ai w procesie budowania marki osobistej	
- szansa dla twórców czy droga do redukcji autentyczności?	
Wprowadzenie	156
Dynamiczny rozwój rozwiązań opartych na generatywnej sztucznej	
inteligencji wspomagającej tworzenie multimodalnych treści (w tym treś	
wzmacniających proces budowania marki osobistej) – przegląd literatury	
Rekomendacje do dalszych badań i dyskusji	
Bibliografia	163
Kostiantyn Pavlov, Olena Pavlova, Oleksandr Dluhopolskyi, Tetiana Ostapenk	0
The concept of nano-economy knowledge impacts of the business	
environment in Ukraine	165
Introduction	166
Literature review	168
Methods	169
Results	169
Discussion	175
Conclusions	176
Bibliography	176
Liudmyla Alieshchenko	
The essence of strategic management for tourism enterprises	
Bibliography	189
Tetiana Sak, Ihor Chulipa	
Digital marketing: analysis of current trends in Ukraine and worldwide	
Digital marketing: analysis of current trends in Ukraine and worldwide  Introduction	191
Digital marketing: analysis of current trends in Ukraine and worldwide  Introduction	191 192
Digital marketing: analysis of current trends in Ukraine and worldwide  Introduction	191 192 196

#### Spis treści

Analysis and Current Trends in Email Marketing	204
Directions of Digital Marketing Development	207
Conclusions	208
Bibliography	209
Larysa Yushchyshyna	
Energy management – state and prospects of development in Ukraine	210
Introduction	
Analysis of the Damage from Russian Aggression in Ukraine's Energy Sector	
Implementation of Energy Management Systems in Ukraine	
Energy Management in the Restoration and Development of Ukraine's	
Energy Sector	217
Conclusions	
Bibliography	
M. L	
Małgorzata Lalak-Dybała	224
Wykorzystanie nowych technologii w opiece pielęgniarskiej	
Elektroniczna dokumentacja medyczna (EDM)	
Robotyka w pielęgniarstwie	
6 1	
Sztuczna inteligencja w pielęgniarstwie	
Nowe technologie w sytuacjach zagrożenia życia	
Podsumowanie	
Bibliografia	232
Sylwia Skrzypek-Ahmed, Andrew E. Zamani, Krzysztof Dyrek, Iloh, John Paul Izuchukwu & Nwammuo Collins	
Internationalisation and globalisation of business and the international	
environment of the company in the context of global marketing	234
Introduction	235
International business	236
Globalization of the enterprise	238
Globalization of the economy and marketing operations	
and internationalization of marketing	243
The process of business internationalization	246
International Marketing in the Context of Export Internationalization	248
Conclusions	253
Bibliography	254

Jerzy Gilarowski, Anna Wiśniewska, Nghargbu K'tso, Hannatu Umar, Agnieszka	ı
Lamb	
Economic determinants of international entrepreneurship – globalisation	
	256
Introduction: International trade - globalization and the entrepreneurial	
process	
International trade	258
The essence and concept of international business and international	265
entrepreneurship	
Enterprise globalization	
International entrepreneurship	
Globalization and the process of business internationalization	
Conclusions	
Bibliography	279
Paweł Barwiak, Olayemi Akinwumi, Mohammed Suleiman Audu, Igor Chulipa	
r awet bar waar, Oadyemi Akinwami, Mohammea Satetman Aada, 1901 Chaupa Przemysław Bochenek, Olga Lel	,
Financial statements as a basic source of information for financial analysis	283
Introduction	
Accounting and economic and financial analysis in business management	
Accounting policy	
Difference between financial analysis and accounting	
Economic analysis and financial planning	
Links and complementary analyses - multidimensional evaluation	
of the company	291
Conclusions	
Bibliography	
210110814F11/	2,
Adam Radziszewski	
Współczesne trendy i wyzwania w przedsiębiorczości firm usług społeczny	ch
na przykładzie PES oraz spółki z o.o	297
Wstęp	298
Współczesne trendy i wyzwania w PES	299
Proces powstawania innowacji w PES	300
Identyfikowanie potrzeb w usługach społeczno-gospodarczych	300
Generowania innowacyjnych rozwiązań	
Wdrożenie pilotażowe rozwiązań	
Podtrzymanie rozwiązania	
Upowszechnianie innowacji	
Zmiana systemowa projektów innowacyjnych	
Współczesne trendy i wyzwania w spółkach z o.o	
Co każdy z partnerów może wnieść do współpracy?	
Trendy i zarazem wyzwania dla spółek z o o	304

Rekomendacje – rekomendowane zasady dobrej współpracy	
Podsumowanie	
Bibliografia	308
Bożena Korzeniewska	
Bezpieczeństwo finansowe przedsiębiorstw w kontekście ubezpieczeń	
społecznych i ubezpieczenia zdrowotnego	
Wprowadzenie	
Istota bezpieczeństwa finansowego przedsiębiorstw	
Polityka w zakresie ubezpieczeń społecznych	
Polityka w zakresie ubezpieczenia zdrowotnego	
Inne obciążenia publicznoprawne	324
Wpływ ubezpieczeń społecznych i ubezpieczenia zdrowotnego	
na bezpieczeństwo finansowe przedsiębiorstw	326
Podsumowanie	329
Bibliografia	330
Ihor Lishchynskyy, Mariia Lyzun	
Concept of urban development poles and their sustainability within global	
economic flows	
Introduction	
The emergence of the ontology of urban development poles	
Typology of development poles	
The effects of developmental poles	
The idea of development axes	
Sustainability of development poles in the context of globalization	
Bibliography	
Miroslav Gejdoš, Urszula Anisiewicz	
Alcide de gasperi – pensatore e ideatore del progetto di integrazione europea	368
Introduzione	
La vita	
La dimensione spirituale di Alcide De Gasperi	
La famiglia di De Gasperi	
Statista De Gasperi	
*	
L'omaggio del papa Benedetto XVI reso all' Alcide De Gasperi	
Conclusioin	
Bibliografia	3/9
Hanna Kostovyat, Viacheslav Rogov	
The theoretical foundations of enterprise's digital transformation	
Conclusion	
Bibliography	400

Hanna Zhosan, Gabriel Jerry Otu	
Analysis of the role of digitalization in enhancing the efficiency of business	
operations	401
Bibliography	412
Anastasiia Simakhova, Vladislav Smyk	
Us and eu experience in franchising development for Ukraine in postwar period	413
Introduction	
The main problems in organizing a franchise business in Ukraine	414
US and EU experience in franchising development for Ukraine	
Conclusions	425
Bibliography	426
Olena Ivashko	
Venture capital investments – current trends and development factors	427
Introduction	
Prerequisites for the development of venture capital investment	428
The essence of venture capital	
Current global trends in venture capital financing	433
Trends in the Ukrainian venture capital market	436
Conclusions	440
Bibliography	440
Iryna Tsymbaliuk	
Inclusive labor market development through green economy and social	
responsibility	442
Introduction	443
Overview of Global Labor Market Challenges Related to the Transition	
to a Green Economy	444
The Role of Corporate Social Responsibility in Supporting Inclusive Growth	
Labor Market Gaps: Gender and Economic Aspects	
Green Economy and Gender Equality Through the Lens of Corporate Social	
Responsibility	452
The Role of Government and Business Policies in Reducing Inequalities	
through Inclusive Approaches	453
Conclusions	
Bibliography	456
Włodzimierz Martyniuk, Norbert Kosior	
Rynek pracy polski w obliczu zmian demograficznych	458
Wprowadzenie	459
Cel artykułu	
Badanie prac naukowych	460

#### INCLUSIVE LABOR MARKET DEVELOPMENT THROUGH GREEN ECONOMY AND SOCIAL RESPONSIBILITY

## Inkluzywny rozwój rynku pracy poprzez zieloną gospodarkę i odpowiedzialność społeczną

\*Dr of Economics, Prof., Lesya Ukrainka Volyn National University in Lutsk, ORCID: 0000-0003-0506-2262

#### Streszczenie

W artykule omówiono globalne wyzwania dla rynku pracy w kontekście przejścia na zieloną gospodarkę. Główna uwaga skupiona jest na zmianach strukturalnych w tradycyjnych sektorach gospodarki oraz konieczności dostosowania siły roboczej do nowych wymagań związanych z wdrażaniem technologii ekologicznych. Artykuł zawiera przegląd danych międzynarodowych, w szczególności raportów OECD, które wskazują na ryzyko utraty miejsc pracy w tradycyjnych branżach oraz nierównomierne tworzenie nowych miejsc pracy w zielonej gospodarce. Zbadano również regionalne dysproporcje, zilustrowane wykresami i tabelami, które pokazują poziom zatrudnienia w zielonych sektorach oraz różnice między regionami i krajami. Analizowane są również ryzyka związane z siła roboczą, szczególnie potrzeba przekwalifikowania pracowników w sektorach najbardziej podatnych na te zmiany. Szczególną uwagę poświęcono kwestii nierówności płci na rynku pracy. Przedstawiono dane dotyczące luki w zatrudnieniu kobiet w zielonych sektorach, gdzie kobiety są mniej reprezentowane, a także różnice w wynagrodzeniach między mężczyznami a kobietami w tych branżach. Znaczną uwagę poświęcono również roli społecznej odpowiedzialności biznesu (CSR) we wspieraniu inkluzywnego rynku pracy. W artykule przeanalizowano, w jaki sposób CSR przyczynia się do przekwalifikowania pracowników, zapewnienia równego dostępu do nowych miejsc pracy oraz wspierania rozwoju lokalnych gospodarek. Zaproponowano ścieżki zmniejszania nierówności ekonomicznych między regionami, zwiększania inkluzywności oraz promowania równości płci poprzez wdrażanie programów wsparcia rządowego i aktywny udział przedsiębiorstw w projektach społecznie odpowiedzialnych.

**Słowa kluczowe:** inkluzywne podejścia, rynek pracy, zielona gospodarka, odpowiedzialność społeczna, nierówność płci, nierówność ekonomiczna, zatrudnienie

#### **Summary**

The article explores the global challenges for the labor market in the context of the transition to a green economy. The primary focus is on the structural changes in the traditional sectors of the economy and the need for workforce adaptation to the new requirements associated with the implementation of environmental technologies. The paper provides an overview of international data, particularly OECD reports, which highlight the risks of job losses in traditional industries and the uneven creation of new jobs in the green economy. Regional disparities are also examined and illustrated with charts and tables that show the employment levels in green sectors and the differences between regions and countries. Furthermore, the article examines the potential workforce challenges, particularly the necessity for re-training workers in sectors most impacted by these changes. Special attention is given to gender inequality in the labor market. The data on the gender employment gap in green sectors, where women are underrepresented, is included, along with wage disparities between men and women in these industries. Significant attention is also devoted to the role of corporate social responsibility (CSR) in supporting an inclusive labor market. The article analyzes how CSR contributes to workforce retraining, ensuring equal access to new jobs, and fostering local economic development. Pathways for reducing economic inequality between regions, increasing inclusion, and promoting gender equality are proposed through the implementation of government support programs and the active involvement of businesses in socially responsible projects.

**Key words:** inclusive approaches, labor market, green economy, social responsibility, gender inequality, economic inequality, employment

#### Introduction

The green economy is gradually becoming one of the key drivers of modern economic development, offering new solutions for combining the economic growth with environmental sustainability and social responsibility. This approach encompasses environmentally safe practices aimed at reducing the impact of human activities on the environment while promoting employment growth, the development of new industries, and increasing social inclusivity.

One of the aspects of the green economy is its ability to create new jobs, particularly in the sectors such as renewable energy, energy efficiency, circular economy, and sustainable agriculture. These sectors not only provide new employment opportunities but also enhance the level of inclusion among different social groups, including women, youth, and the underprivileged<sup>1</sup>.

<sup>&</sup>lt;sup>1</sup> N. V. Pavlikha, O. A. Korneliuk, I. O. Tsymbaliuk, Metodolohii proiektnoho menedzhmentu dlia tsyrkuliarnykh biznes-modelei: perevahy ta mozhlyvosti [Project management methodologies for circular business models: Benefits and opportunities], "Intelekt" 2023; XXI(3): 74-80.

The green economy is a concept of an economic model that involves the use of environmentally sustainable methods of production and consumption, which minimize negative environmental impacts while promoting social and economic development. This model is considered an alternative path to achieving the economic growth without harming the natural resources and ecosystems.

At the heart of the green economy is the shift away from the traditional resource-intensive and polluting practices in favor of the technologies based on the renewable energy sources, resource reuse, and reduced carbon emissions. According to the UN Development Program, the green economy promotes GDP growth, job creation, and poverty reduction while protecting and restoring the ecological systems<sup>2</sup>,<sup>3</sup>.

Globally, the transition to a green economy is supported by various initiatives, including the Paris Agreement, where the countries committed to reduce the greenhouse gas emissions and promote energy-efficient technologies. This creates favorable conditions for the development of new markets and job opportunities, allowing a broader range of social groups to participate in the economic activity through inclusive programs and corporate social responsibility initiatives<sup>4</sup>.

The concept of a green economy aligns economic interests with the environmental goals, promoting sustainable development and equitable distribution of the benefits within society.

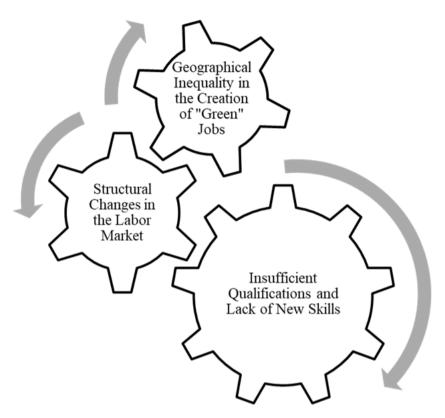
### Overview of Global Labor Market Challenges Related to the Transition to a Green Economy

The transition to a green economy is essential in addressing the climate change and the environmental challenges, but it also presents significant challenges for the labor market. These challenges include the need for the workforce to adapt to the new market demands, structural shifts in traditional economic sectors, and the necessity for upskilling the employees to meet the requirements of new green technologies (figure 1).

<sup>&</sup>lt;sup>2</sup> OECD, Reporting gender pay gaps in OECD countries: Guidance for pay transparency implementation, monitoring and reform, OECD Publishing 2023.

<sup>&</sup>lt;sup>3</sup> OECD, OECD Employment Outlook 2023. Artificial Intelligence and the Labour Market. Online: https://www.oecd-ilibrary.org.

<sup>&</sup>lt;sup>4</sup> I. O. Tsymbaliuk, Instytutsii ta instrumenty inkliuzyvnoho rozvytku YeS: dosvid i perspektyvy dlia Ukrainy [in:] EUROPEAN PERSPECTIVE: suchasni vyklyky ta mozhlyvosti dlia Ukrainy, N. V. Pavlikha (ed.), Vezha-Druk, Lutsk 2024, p. 8-28.



**Figure 1.** Labor market risks associated with the transition to a green economy *Source: developed by the author* 

Traditional industries, such as mining, oil, and gas, are facing significant declines due to the shift toward environmentally friendly energy sources. This leads to job losses, particularly in regions where the economy is heavily dependent on these sectors. According to an OECD report, such transformations may exacerbate economic inequality and require active workforce support from the governments and businesses through retraining programs<sup>5</sup>. In regions dominated by extractive industries, particularly in countries reliant on fossil fuels, the risk of mass unemployment is substantial. To mitigate this risk, it is essential to foster the growth of green economic sectors in tandem with job creation initiatives.

One of the primary challenges is that a significant portion of the workforce lacks the necessary knowledge and skills to work in the green economy. Approximately 40% of the workforce in certain sectors will require retraining to adapt to new environmental standards<sup>6</sup>. This calls for a substantial investment in education programs and

<sup>&</sup>lt;sup>5</sup> OECD, OECD Employment Outlook 2023... op. cit.

<sup>&</sup>lt;sup>6</sup> Ibidem.

partnerships between businesses and educational institutions to develop the required competencies.

Despite the overall growth in jobs within the green sectors, their distribution is uneven. Regions with access to the latest technologies and investments benefit more from the transition to a green economy. For example, rural and remote areas may lag in adopting green technologies, which exacerbates inequality and reduces employment opportunities. This creates what is known as the "green divide", observable both nationally and globally. The gender gap also remains significant, with women making up only 32% of the workforce in these sectors, underscoring the need for inclusive employment approaches and the engagement of vulnerable social groups.

### The Role of Corporate Social Responsibility in Supporting Inclusive Growth

Corporate social responsibility (CSR) plays a critical role in minimizing the negative impacts of the transition to a green economy and ensuring labor market inclusivity. Companies that implement CSR practices not only work on reducing their environmental footprint but also actively promote the creation of new opportunities for various social groups.

Corporations take responsibility for training their employees in new skills necessary for the work in the green economy by implementing training programs focused on energy-efficient technologies, waste management, and environmental management. For example, CSR initiatives in the renewable energy sectors promote the creation of inclusive job opportunities for women, youth, and vulnerable social groups<sup>9</sup>.

Businesses also play an essential role in expanding labor market access for groups traditionally excluded from the economic processes by actively supporting gender equality in the workplace, reducing the wage gap, and ensuring equal conditions for both men and women in green sectors of the economy<sup>10</sup>.

Socially responsible corporations invest in the development of local communities, particularly in regions with limited access to new technologies and green investments. These investments help create new jobs and reduce economic inequality between regions.

Thus, corporate social responsibility becomes an important tool for fostering inclusive labor market growth in the global transition to a green economy.

<sup>&</sup>lt;sup>7</sup> OECD, Jobs [Data set]. Online: https://data.oecd.org/jobs.htm.

<sup>&</sup>lt;sup>8</sup> OECD, Reporting gender pay gaps in OECD countries... op. cit.

<sup>9</sup> Ibidem.

<sup>&</sup>lt;sup>10</sup> OECD, Gender wage gap [Data set]. Online: https://doi.org/10.1787/7cee77aa-en.

#### Job Creation in the Green Economy and Its Impact on Local Economies

The growth of the green economy has become a major driver of job creation and a tool for supporting sustainable development in local economies. Over the past few decades, the environmental policy has gained prominent importance on the agendas of OECD countries. Governments have been developing and implementing the measures aimed at reducing carbon emissions, air pollution, and improving energy efficiency. However, the impact of these programs on the labor market remained limited for an extended period of time. Only recently the new initiatives have begun to focus more on employment, particularly on job creation in the green sectors.

A significant increase in the stringency of the environmental policies regarding air emissions, energy use, and carbon emissions has been observed in OECD countries over the last three decades. Between 1990 and 2020, the strictness of the environmental policy has increased the most between 2000 and 2010 (figure 2).

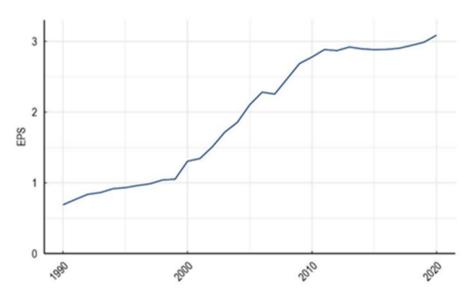


Figure 2. Environmental Policy Stringency across the OECD, 1990-2020 Source: OECD, Job creation and local economic development 2023: Bridging the great green divide, OECD Publishing 2023

These measures are the part of a broader green growth strategy aimed at combining the economic development with environmental protection. However, until recently, the impact of these policies on the labor market remained indirect, and only a few included a direct support for employment.

Efforts to stimulate the green growth in various countries have had a positive effect on the job creation in the sectors such as renewable energy, waste management, energy-efficient construction, and eco-friendly transportation. OECD governments have increasingly implemented programs that promote job creation in these sectors

and provide mechanisms for workforce retraining. Special attention is given to local economies, where significant structural changes occur due to the introduction of environmental standards.

The green growth programs have become a catalyst for change in local economies, not only fostering employment growth but also helping to minimize negative environmental impacts. For instance, countries that actively implement environmentally sustainable technologies experience economic benefits and provide their populations with stable jobs in environmentally significant sectors.

While the green economy is growing rapidly, most jobs in OECD countries are still not directly related to the green sectors or tasks. As of 2021, only 18% of jobs in OECD countries involved a significant share of 'green' tasks, either created by the transition to a green economy or modified in response to it. These jobs are primarily concentrated in industries such as renewable energy, energy efficiency, waste management, and sustainable agriculture.

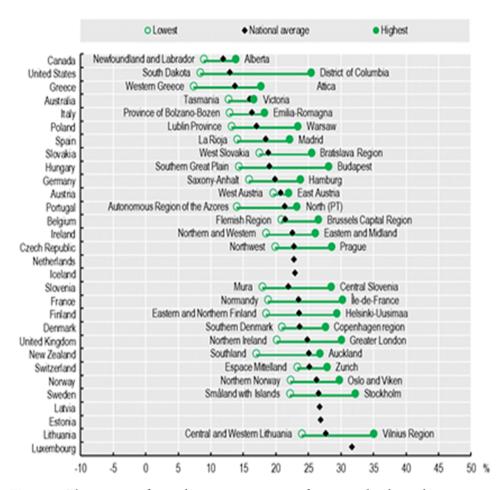
However, this overall figure masks significant regional differences. Some regions exhibit high levels of employment in "green" sectors, while others lag considerably. For example, regions in Southern Europe, such as Greece, Italy, Portugal, and Spain, have a lower proportion of green-related jobs, whereas Baltic and Northern countries (e.g., Lithuania, Sweden, Finland) demonstrate higher employment levels in these sectors. In some countries, such as France, the UK, Luxembourg, and Switzerland, the share of green jobs is also significant.

The proportion of such jobs across regions ranges from 7% (in western Greece) to 35% (in the Vilnius region, Lithuania). This highlights the considerable discrepancies between regions within the OECD, emphasizing the uneven implementation of environmental policies at the local labor market level<sup>11</sup>.

These differences also suggest that the labor markets do not adapt equally quickly to the green transition. In regions with lower levels of green jobs, challenges with access to environmental technologies and investments limit employment opportunities in new sectors. This is especially evident in rural and less-developed regions, where the financial or infrastructural barriers constrain the access to the green initiatives. On the other hand, more urbanized and developed regions are quicker to adopt the environmental policies, creating favorable conditions for the development of new professions in renewable energy, recycling, and eco-friendly construction.

Within countries, the share of jobs with "green tasks" shows considerable variation, indicating the uneven implementation of green initiatives even at the national level. As illustrated in figure 2, the percentage of jobs related to green tasks differs significantly both between and within countries. On average, the gap between regions within a single country is 7 percentage points, but in some countries, this figure is much higher.

<sup>&</sup>lt;sup>11</sup> OECD, Job creation and local economic development 2023: Bridging the great green divide, OECD Publishing 2023.



**Figure 2.** There is significant dispersion in terms of green-task jobs within countries *Source: OECD, Job creation and local economic... op. cit.* 

In Hungary, the regional difference reaches 14 percentage points, while in Lithuania, Finland, and France, it is 11 percentage points. In the United States, this gap extends to 17 percentage points, largely due to the high concentration of "green" jobs in the Washington, D.C. area compared to other regions. Interestingly, in 19 out of 25 countries with available data on multiple regions, the capital region has the highest share of jobs with green tasks. Exceptions include Canada, Germany, Italy, Portugal, New Zealand, and Australia, where these trends are less pronounced.

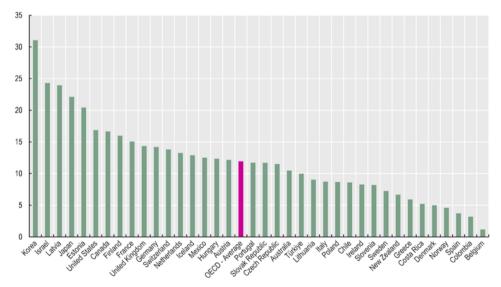
In large countries like Australia, Canada, and the United States, regional variations may be partly obscured due to the vast size of the regions, making it difficult to detect sub-regional differences.

#### Labor Market Gaps: Gender and Economic Aspects

The transition to green economy affects various aspects of the labor market, particularly gender and economic disparities. Despite the growth of new jobs in green sectors, inequality in access to these jobs remains significant, especially for women and low-income groups. The green economy requires the specific skills and qualifications, which are often lacking in these groups. For example, the gender gap in green sector employment persists: only 32% of workers in renewable energy are women, a significantly lower figure compared to the other sectors<sup>12</sup>, 13.

Despite considerable efforts to ensure gender equality, the gender wage gap remains a serious issue in the labor market. According to the OECD, on average, women working full-time earn 11,9% less than men in equivalent positions. This means that the average woman earns around 88 cents for every dollar or euro earned by a man in full-time employment<sup>14</sup>. However, this figure can vary significantly depending on the country, ranging from 1,2% in Belgium to 31,1% in South Korea.

The gap widens even further when considering all forms of employment, not just fulltime positions. This is because women are more likely to work part-time, while men are more often employed in jobs with longer hours. As a result, women's overall income is lower, as part-time work reduces not only total the earnings but also access to additional wage components such as bonuses and premiums, which are often linked to hourly pay (figure 3).



**Figure 3.** Gender Pay Gap for Full-Time Workers in OECD Countries (2021 or most recent data available)

Source: OECD, Reporting gender pay gaps in OECD countries... op. cit.

<sup>&</sup>lt;sup>12</sup> OECD, Reporting gender pay gaps in OECD countries... op. cit.

<sup>&</sup>lt;sup>13</sup> OECD, Jobs [Data set]. Online: https://data.oecd.org/jobs.htm.

<sup>14</sup> Ibidem.

Moreover, the regional data highlights significant economic disparities between the developed and the underdeveloped regions of the world, where the access to new 'green' jobs is limited due to a lack of investments and technologies. This particularly affects employees living in extreme poverty. In 2023, approximately 241 million workers worldwide were living in extreme poverty, earning less than \$2,15 per day per person, based on purchasing power parity (PPP). Between 2020 and 2021, the share of workers living in extreme poverty decreased, largely due to a reduction in working poverty rates in lower-middle-income countries.

However, in 2023, despite the overall employment growth and the stabilization of extreme poverty rates, the number of workers living in such conditions increased by about one million people. A similar trend was observed in the segment of moderate poverty: the number of workers living in moderate poverty (earning less than \$3,65 per day per person in PPP terms) increased by nearly 8,4 million in 2023. Only in countries with upper-middle incomes, a reduction in the number of workers living in moderate poverty took place.

**Table 1.** Poverty Rates Among Employed Persons

Country group	Working	Rates (percentages)			Numbers (millions)				
	poverty	2020	2021	2022	2023	2020	2021	2022	2023
World	Extreme	7,7	7,3	7,1	6,9	248,0	241,6	240,1	241,1
	Moderate	12,5	12,1	12,2	12,2	402,7	401,4	414,9	423,4
Low-income countries	Extreme	38,9	38,5	38,7	39,0	90,5	92,7	96,7	100,6
	Moderate	26,6	26,4	26,5	26,7	61,9	63,5	66,3	68,9
Lower-middle- -income countries	Extreme	12,8	11,8	10,9	10,2	139,3	132,0	127,3	124,7
	Moderate	26,1	25,6	25,2	24,7	283,7	287,6	294,8	302,1
Upper-middle- -income countries	Extreme	1,4	1,2	1,2	1,1	17,9	16,7	15,9	15,6
	Moderate	4,3	3,7	3,9	3,8	56,9	50,0	53,6	52,0

Source: International Labour Office, World employment and social outlook: Trends 2024, International Labour Organization 2024

Countries with upper-middle incomes demonstrate the highest readiness for the green economy. This group of countries has shown the most favorable conditions for implementing "green" initiatives due to the availability of technologies, investments, and supportive policies. For the upper-middle-income countries, such as certain European and Latin American nations, the level of readiness for the green economy is rated as high.

The lack of investments and technology in the underdeveloped regions significantly limits the access to employment opportunities in green sectors. This highlights the importance of the active policies to support low- and middle-income countries by attracting investments and introducing modern technologies that would boost the employment levels and reduce poverty.

## **Green Economy and Gender Equality Through the Lens** of Corporate Social Responsibility

Corporate social responsibility (CSR) plays a vital role in narrowing these gaps. Companies implementing CSR programs not only focus on the environmental sustainability but also actively support inclusive labor market programs. This includes initiatives aimed at promoting gender equality, creating programs for upskilling women and vulnerable social groups, and expanding opportunities for low-income individuals through educational and retraining programs.

Today, many international corporations run programs to support women's employment in renewable energy and other green economy sectors. These programs aim to ensure equal access to new opportunities, including professional training, internships, and inclusive employment policies<sup>15</sup>, 16

The need to strengthen corporate responsibility for work-related outcomes is reinforced by the latest 2024 report from the International Labour Organization (ILO) on global trends. According to this report, approximately 435 million people worldwide are deprived of stable income through work. Millions more face deteriorating working conditions, declining real wages, job instability, or lack of social protection<sup>17</sup>.

In light of these challenges, changes in employment and labor conditions are on the agenda. To ensure greater transparency and accountability in labor relations, a global public consultation on proposed revisions to several Global Reporting Initiative (GRI) standards is ongoing until October 2024. These revisions cover the key areas such as:

- GRI 402: Labor and Management Relations,
- GRI 401: Employment,
- GRI 202: Market Presence.

This process, led by an expert group that includes representatives of workers, employers, and the ILO, aims to align labor standards with international business and human rights requirements, particularly those set by the ILO, the UN, and the OECD.

In addition to these standards, two rounds of consultations on working conditions and the protection of workers' rights will be held over the next 12 months. A total of 11 GRI standards are expected to be updated, with a special focus on human

<sup>&</sup>lt;sup>15</sup> OECD, Reporting gender pay gaps in OECD countries... op. cit.

<sup>&</sup>lt;sup>16</sup> I. Tsymbaliuk, N. Pavlikha, Analysis of income structure of the population and the role of the inclusive labor market in reducing social vulnerability, "Transactions of Kremenchuk Mykhailo Ostrohradskyi National University" 2023; 4(141): 33-41.

<sup>&</sup>lt;sup>17</sup> Global Reporting Initiative, Blueprint to advance transparency and accountability for labor impacts. Online: https://www.globalreporting.org/news/news-center/blueprint-to-advance-transparency-and-accountability-for-labor-impacts/.

rights and due diligence in business practices<sup>18</sup>. The areas covered by these standards include:

- Employment management of non-standard employment forms, fair recruitment, internships, protection of personal data, and termination of employment.
- Wages and working hours assessment of living wages, gender pay gaps, and social protection coverage.
- Significant changes for workers consultation with employees regarding reassignment, retraining, and termination of employment.

Several countries and companies have already implemented successful programs aimed at achieving gender equality through socially responsible initiatives. For example, in Sweden and Norway, gender equality is a mandatory part of the corporate reporting. Companies actively implement programs that ensure equal access to jobs, particularly in green economy sectors such as the renewable energy.

Siemens actively supports programs that increase the number of women in green sectors through inclusive employment strategies. Their programs include training and support for women in engineering, energy, and environmental management, displaying a successful example of CSR promoting greater inclusivity.

Green initiatives, such as the transition to renewable energy sources and the implementation of energy-efficient technologies, hold significant potential for improving gender equality. Since these sectors are new and rapidly growing, they offer opportunities for women to be employed on equal terms with men. Specifically, initiatives such as training and retraining programs in the renewable energy sector help ensure equal access to new professions and reduce the gender pay and employment gaps.

This demonstrates that the green economy can serve as a platform not only for achieving environmental goals but also for fostering social justice and inclusive growth.

## The Role of Government and Business Policies in Reducing Inequalities through Inclusive Approaches

Government policies play a crucial role in addressing gender and economic inequalities in the labor market during the transition to a green economy through inclusive approaches. Many OECD countries have already implemented initiatives aimed at ensuring equal access to new jobs in the green sectors. One such policy is gender pay gap reporting, which allows governments and companies to track gender inequality and develop strategies to reduce it<sup>19</sup>,<sup>20</sup>.

<sup>18</sup> Ibidem.

<sup>&</sup>lt;sup>19</sup> I. Tsymbaliuk, N. V. Pavlikha, Inkliuzyvna ekonomika: shliakh do sotsialnoi rivnosti ta ekonomichnoho rozvytku, Vezha-Druk, Lutsk 2023.

<sup>&</sup>lt;sup>20</sup> I. Tsymbaliuk, N. Pavlikha, Inclusive economy in contemporary management models: Definition, global challenges, and its role in achieving sustainable development [in:] Modern management tools in the latest models of socioeconomic development, Higher School of Social and Economic, Przeworsk 2023, p. 102-119.

Governments also actively promote retraining programs for employees, particularly those with low skill levels, enabling the vulnerable groups to integrate into new green economy sectors and improving their chances of employment. Subsidy programs, the creation of state funds to support "green" initiatives, and collaboration with private companies contribute to engaging women and the youth in the new fields. Countries like Germany and France actively promote policies that reduce the economic disparities through regional green growth programs<sup>21</sup>,<sup>22</sup>.

Many governments implement active labor market policies aimed at supporting the workers affected by the technological changes and the transition to ecological production models. Key areas of focus include retraining, skill enhancement, and the creation of new employment opportunities in sectors linked to the green economy such as renewable energy, waste management, and eco-friendly construction<sup>23</sup>,<sup>24</sup>.

Key strategies include:

- Investment in workforce retraining. Governments promote training programs for workers in sectors affected by automation or ecological changes. For example, in OECD countries, the demand for professionals in renewable energy and environmental management is rising, and policies are aimed at ensuring equal access to such opportunities<sup>25</sup>.
- Support for vulnerable groups. In Asian countries, support programs include subsidies for those affected by crises and skill enhancement initiatives that help integrate women, youth, and migrants into new jobs in the green economy<sup>26</sup>.

Governments and the private sector actively collaborate to achieve inclusivity in the green economy. An example is the cooperation between the companies and governments in implementing training and retraining programs. For instance, within the framework of the GRI standards reporting, companies are required to adhere to transparent labor practices, including supporting the employment of women, youth, and other vulnerable populations in the new green economy sectors<sup>27</sup>.

Inclusive approaches to training and skill development are the essential tools for ensuring equal opportunities in the green economy. Governments and companies focus on developing skills needed for work in emerging sectors such as the renewable energy and the environmental management. According to the World Economic Forum, more than half of the workforce will require additional training to remain competitive amid the rapid changes in the labor market<sup>28</sup>.

<sup>&</sup>lt;sup>21</sup> OECD, Jobs [Data set]... op. cit.

<sup>&</sup>lt;sup>22</sup> N. V. Pavlikha, I. Tsymbaliuk, N. L. Khomiuk et all, Bezpeka staloho rozvytku rehioniv ta terytorialnykh hromad Ukrainy na zasadakh inkliuzyvnoho zrostannia. Vezha-Druk, Lutsk 2023.

<sup>&</sup>lt;sup>23</sup> World Economic Forum, The Future of Jobs Report 2023. Online: https://www.weforum.org.

<sup>&</sup>lt;sup>24</sup> N. V. Pavlikha, I. Tsymbaliuk, O. V. Uniha et all, Ekonomika dobrobutu: rehuliuvannia dokhodiv naselennia ta rozvytok rynku pratsi, Vezha-Druk, Lutsk 2022.

<sup>&</sup>lt;sup>25</sup> OECD, OECD Employment Outlook 2023... op. cit.

<sup>&</sup>lt;sup>26</sup> Asian Development Bank, Strengthening Active Labor Market Policies to Drive an Inclusive Recovery in Asia. Online: https://www.adb.org.

<sup>&</sup>lt;sup>27</sup> Global Reporting Initiative, Blueprint to advance transparency... op. cit.

<sup>&</sup>lt;sup>28</sup> World Economic Forum, The Future of... op. cit.

Through these strategies, workers gain access to new opportunities in the growing sectors, and the labor market becomes more inclusive, considering gender, age, and socio-economic factors.

The private sector also holds a significant potential to reduce gender and economic inequalities through the implementation of inclusive business models and policies. Companies that emphasize sustainability and inclusion actively promote training programs for the vulnerable groups, ensure equal working conditions, and provide career growth opportunities. Such initiatives help close wage and employment gaps, creating a fairer labor market.

Thus, the synergy between government and private initiatives is crucial for building an inclusive labor market during the transition to a green economy. Through joint efforts in corporate social responsibility and government policies, significant inequality reduction can be achieved, fostering conditions for sustainable economic development.

#### **Conclusions**

The article analyzes the key challenges that the labor market is confronted with during the transition to a green economy, particularly the structural changes in traditional industries and the need for workforce retraining. It is established that the shift to green economy involves the risk of job losses in traditional sectors, such as the mining industry, while new opportunities arise in green sectors, where job creation is uneven both at the regional and national levels. This underscores the need for a more flexible approach to government policies and support programs for regions lagging in the adoption of green technologies. At the same time, the implementation of stricter environmental standards creates conditions for the growth of new economic sectors, which in turn generates local employment opportunities.

The green transition impacts employment structures in OECD countries unevenly. Only a small portion of the population works in sectors where green tasks play a central role, highlighting the necessity to strengthen the policies supporting inclusive labor market development and create opportunities for the workforce retraining in regions falling behind in the green transition. Despite the overall growth of employment in green sectors, this development remains uneven, requiring additional efforts from both governments and businesses to support regions struggling to implement green technologies. Combating economic inequality remains a challenge for the green economy, particularly in countries where the gap between the rich and the poor continues to widen, and new jobs in green sectors are not accessible to the most vulnerable populations.

A significant issue identified in the study is gender inequality in the labor market during the green transition. Women are significantly underrepresented in environmentally critical sectors, and the gender pay gap remains a substantial problem. This calls for the development of inclusive policies aimed at increasing the number of women in the green sectors and eliminating inequality in the availability of emerging employment opportunities.

The role of corporate social responsibility (CSR) in supporting the inclusive development of the labor market is crucial for minimizing the negative impacts of the green economy transition. Socially responsible businesses can play a leading role in retraining workers, ensuring equal opportunities for various social groups, and contributing to local community development.

Thus, for a successful transition to a green economy, active government support in the form of workforce retraining programs is essential, along with collaboration with the businesses to implement socially responsible initiatives. This will help reduce the socio-economic inequality and ensure equal access to new job opportunities in green economic sectors.

#### **Bibliography**

Asian Development Bank, *Strengthening Active Labor Market Policies to Drive an Inclusive Recovery in Asia*. Online: https://www.adb.org.

Global Reporting Initiative, *Blueprint to advance transparency and accountability for labor impacts*. Online: https://www.globalreporting.org/news/news-center/blueprint-to-advance-transparency-and-accountability-for-labor-impacts/.

International Labour Office, World employment and social outlook: Trends 2024, International Labour Organization 2024.

OECD, Reporting gender pay gaps in OECD countries: Guidance for pay transparency implementation, monitoring and reform, OECD Publishing 2023.

OECD, OECD Employment Outlook 2023. Artificial Intelligence and the Labour Market. Online: https://www.oecd-ilibrary.org.

OECD, Jobs [Data set]. Online: https://data.oecd.org/jobs.htm.

OECD, Gender wage gap [Data set]. Online: https://doi.org/10.1787/7cee77aa-en.

OECD, Job creation and local economic development 2023: Bridging the great green divide, OECD Publishing 2023.

Pavlikha N. V., Korneliuk O. A., Tsymbaliuk I. O., Metodolohii proiektnoho menedzhmentu dlia tsyrkuliarnykh biznes-modelei: perevahy ta mozhlyvosti [Project management methodologies for circular business models: Benefits and opportunities], "*Intelekt*" 2023; *XXI*(3): 74-80.

Pavlikha N. V., Tsymbaliuk I., Khomiuk N. L. et all, *Bezpeka staloho rozvytku rehioniv ta terytorialnykh hromad Ukrainy na zasadakh inkliuzyvnoho zrostannia*. Vezha-Druk, Lutsk 2023.

Pavlikha N. V., Tsymbaliuk I., Uniha O. V. et all, *Ekonomika dobrobutu: rehuliuvannia dokhodiv naselennia ta rozvytok rynku pratsi*, Vezha-Druk, Lutsk 2022.

Tsymbaliuk I., Pavlikha N., Analysis of income structure of the population and the role of the inclusive labor market in reducing social vulnerability, "*Transactions of Kremenchuk Mykhailo Ostrohradskyi National University*" 2023; 4(141): 33-41.

Tsymbaliuk I., Pavlikha N., Inclusive economy in contemporary management models: Definition, global challenges, and its role in achieving sustainable development [in:] *Modern management tools in the latest models of socioeconomic development*, Higher School of Social and Economic, Przeworsk 2023, p. 102-119.

Tsymbaliuk I., Pavlikha N. V., *Inkliuzyvna ekonomika: shliakh do sotsialnoi rivnosti ta ekonomichnoho rozvytku*, Vezha-Druk, Lutsk 2023.

Tsymbaliuk I. O., Instytutsii ta instrumenty inkliuzyvnoho rozvytku YeS: dosvid i perspektyvy dlia Ukrainy [in:] *EUROPEAN PERSPECTIVE: suchasni vyklyky ta mozhlyvosti dlia Ukrainy*, Pavlikha N. V. (ed.), Vezha-Druk, Lutsk 2024, p. 8-28.

World Economic Forum, *The Future of Jobs Report 2023*. Online: https://www.weforum.org.