



SUSTAINABLE DEVELOPMENT FOR UKRAINE: EU BENCHMARK AND FORESIGHT METHODOLOGY

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Abstract: The importance of mobbing as a pathological phenomenon that occurs in the workplace is discussed. Attention was also paid to the issues of human resource management that can be a source of mobbing behavior in organizations. Various approaches to defining mobbing and its characteristics are briefly described. Then the focus was on the types of mobbing pathologies occurring in the organization. Based on empirical research, it indicates human resource management and its relationship with the most common manifestations of pathological behaviors in the workplace of people included in the survey.

Keywords: human resource management, manifestations of mobbing, mobbing, pathology

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Introduction

The people, organizations, institutions and nations, as well as the trends, events and problems they deal with are more numerous, more closely related, and more difficult to predict (Sardar 2010, pp. 177-184; Buehring, Bishop 2020, pp. 408-432). Foresight is described as a tool for enhancing innovation and change at various levels, in comparison to incremental improvements and inertia (Patton 2005, pp. 1083-1092). Forecasting methodologies enable individuals and businesses to anticipate different future scenarios and plan for greater resilience for the future (Gariboldi et al. 2021, p. 1; Chahrour, Jurado 2021). Foresight therefore helps to identify discontinuities, trends, technology innovations and future opportunities in promising areas of strategic research, and to alert one of potential threats to support planning and strategy shaping (Paliokaitė, Martinaitis, Reimeris 2015, pp. 185-199). Understanding foresight means anticipating and judging subjectively, often across disciplinary boundaries when precise techniques for solving complex problems are lacking (Maukscha, von der Gracht, Gordon 2020, pp. 1-14). The practice of foresight therefore depends to a great extent on in-depth reflection, evaluation and vision of the organization, indicating the future direction (Devaney, Henchion 2018, pp. 45-55). The value of this type of future-oriented thinking depends on both rational and intuitive mental processes used to create images of the future as a form of cognitive intelligence (Hines et al. 2017, p. 4).

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The method of foresight was formed as a result of the convergence of strategic analysis and forecasting. The methodology has absorbed dozens of traditional and new expert methods. Bishop (2007, p. 98) indicated the main stages of foresight research: analysis of the current situation, the formation of essential conditions (measurable goals in the future), project preparation etc. Therefore, one or another of the methods used in foresight is covered in a large number of economic publications.

The need for environmental foresight has increased in recent decades as sustainable development problems accumulate. In attempts to reach sustainable development goals, substantial effort has been devoted to forecasting the future of social-ecological systems. The authors highlight that forecasts are filled with irreducible uncertainties due to drivers beyond the scope of ecology (for example, climate change, demographic change, and management interventions), unknown feedbacks in coupled social-ecological systems, and unpredictable human actions (Carpenter 2002, pp. 2069-2083).

There are many national and international sources about foresight methodologies. One of the most comprehensive packages is the Futures Research Methodology report 3.0 by the Millennium project (Glenn, Gordon 2009). This report consists of 37 chapters, each of which covers one specific method (Futures Wheel, Scenarios etc.) or category of methods (Systems Perspectives, Normative Forecasting etc.).

Bengston, Kubik, and Bishop (2012, p. 10) present an overview of futures research and its potential to enrich environmental planning and policy by offering a cross-fertilization of new ideas and approaches, providing a more complete view of emerging environmental problems, and facilitating the development of strategies to increase adaptive capacity.

European Foresight activities are also summarized on the European Foresight website (foresight.jrc.ec.europa.eu) and the European Foresight Platform, which aims at building a global network that brings together different communities and individual professionals to share their knowledge about foresight, forecasting and other methods of future studies (www.foresight-platform.eu). The *European Foresight Monitoring Network* (2007) presents an analysis of the general and specific objectives of more than 500 foresight exercises in Europe. This provides more detailed insight into methodological and practical issues.

One of the most comprehensive coverage indicators of sustainable development (that could be used and in fact is used for environmental foresight) was developed by the United Nations Commission on Sustainable Development, the World Bank and the European Commission. *The Global Green Economy Index* (2018) defined indicators and datasets within: leadership and climate change (head of state, media coverage, international forums, climate change performance), efficiency sector (buildings, transport, energy, tourism, resource efficiency), markets and investment (renewable energy investment, cleantech innovation, corporate sustainability, green investment facilitation) and the environment (agriculture, air quality, water, biodiversity and habitat, fisheries, forests).

It should be noted that foresight research is conducted in Ukraine – “Foresight of Ukrainian Economy: mid-term (2015-2020) and long-term (2020-2030) time horizons” – based on the method of expert groups, the Delphi method, SWOT analysis, in addition to the development of scenarios. Some results of this research are used in this paper.

Results

Sustainable development in 1992 at the UN Millennium Summit in Rio de Janeiro was recognized as a global priority for humanity. The implementation of a sustainable development strategy involves a combination of economic efficiency, social stability and environmental safety. Only because of a high level of air pollution, a country may lose up to 15% of the harvest. The aggravating threats the environment faces have given rise to a necessity to forecast at least approximate scenarios of future.

The agreement between Ukraine and the EU envisage the implementation of sustainable economic development, which corresponds to the principles of implementing the strategy of sustainable development adopted at the UN summit “Rio + 20”. Realization of the EU sustainable development basics (the Treaty of Lisbon), such as peace, well-being, equality, price stability and a high level of environmental protection, is impossible without multilevel decisions.

To form a vision of a possible future, we propose to use the Foresight methodology. This methodology presents a future that may not be interpreted as a simple continuation of the past, as this future acquires brand new contents, forms, and structures. On the one hand, the Foresight method will provide a vivid scenario for Ukraine, if the implementation of environmental directives in accordance with the EU-Association Agreement do not take place in 2015-2025. Currently, out of 152 directives, 43% have been implemented. Furthermore, the Foresight methodology enables one to build the desired future.

This perspective is crucial in planning and in acting effectively according to basic principles: the future can be created. It depends on the efforts. Foresight makes us realize that every possible future is created by the decisions we make now; Foresight is primarily a tool for communicating about the future. In a situation when many different images of the future are struggling, the people behind them are important; the future cannot be 100% predicted.

The ecological statistics prove that Ukraine has enormous problems with waste management, renewable sources, in addition to the level of atmospheric air pollution. In fact, two thirds of the country’s population reside in areas where the air does not meet the hygiene standards. Ukrainian investments in environmental protection are growing (*Table 1*).

Table 1. Investments and expenditures on environmental protection in Ukraine

Year	Capital investments in current prices, UAH	Current expenditures in current prices, UAH	TOTAL, UAH	TOTAL, MM. Euro
2013	6038783000	14339060400	20377843400	1880.9
2014	7959853900	13965726000	21925579900	1342.1
2015	7675597000	16915535200	24591132200	1031.6
2016	13390477300	19098224800	32488702100	1118.9
2017	11025535200	20466423300	31491958500	1009.7
2018	10074279300	24317991000	34392270300	1061.0
2019	16255671800	27480190300	43735862100	1510.7

Source: (<http://www.ukrstat.gov.ua/>)

According to the Environmental Vulnerability Index of the South Pacific Applied Geoscience Commission, Ukraine has the status of a highly vulnerable country in three respects: environmental vulnerability, internal ecosystem vulnerability and the degree of degradation (external stability of the ecosystem). A similar situation is observed in our west neighboring countries – EU members and non-members. However, according to the 2018 Environmental Performance Index (ranking 180 countries on 24 performance indicators) Ukraine is far behind the EU members in establishing environmental policy goals (*Table 2*).

Table 2. 2018 EPI Ranking of countries and Environmental Vulnerability Index

Rank (EPI)	Country	Environmental Performance Index	Environmental Vulnerability Index classification
28	Slovakia	70.60	vulnerable
43	Hungary	65.01	highly vulnerable
45	Romania	64.78	highly vulnerable
50	Poland	64.11	highly vulnerable
109	Ukraine	52.87	highly vulnerable

Source: *2018 Environmental Performance Index* – <https://epi.envirocenter.yale.edu/downloads/epi2018policymakerssummaryv01.pdf>; EVI classification for countries – <http://www.vulnerabilityindex.net/wp-content/uploads/2015/05/EVI%20Country%20Classification.pdf>

According to the Human Development Index 2020 under the United Nations development program, Ukraine is behind the EU members (*Table 3*). The Human Development Index is useful to articulate the objectives of development and improve people's well-being by ensuring an equitable, sustainable and stable planet.

Table 3. Human Development Index and Environmental sustainability indices in 2020

Country	Carbon dioxide emissions per capita (tonnes)	Forest area (total change %, 1990-2016)	Fresh water withdrawals (% of total renewable water resources)	Natural resource depletion (% of GNI)	Human Development Index/ Rank
Poland	9.1	6.5	16.7	0.4	0.880/35
Slovakia	6.6	1.0	1.1	0.0	0.860/39
Hungary	5.1	14.3	0.3	0.3	0.836/43
Romania	3.8	8.4	3.2	0.7	0.854/40
Ukraine	5.1	4.4	4.9	0.9	0.779/74
Belarus	6.9	11.1	2.4	0.8	0.823/53

Source: Human Development Reports (<http://hdr.undp.org/en/countries>)

Ukraine is an example of a country that needs a new sustainable consciousness. After all, environmental standards are not yet integrated either in everyday life or in sectoral policies, as in the European Union. Nevertheless, the national strategy of approximating Ukraine's legislation to the EU covers the whole range of enterprises, institutions and organizations involved in the implementation of Chapter 6 "Environment" and Annex XXX to the Association Agreement at the national, regional and local level.

The transformation would not be a simple and inexpensive process in any case. For instance, approximation of the Ukrainian environmental legislation to EU is connected with a number of procedural issues, the development of new procedures and technical requirements, educational and informational activities, training programs as well as public awareness raising activities (*Table 4*).

Table 4. Cost of approximation to EU legislation, 2015-2025

	Sector according to Annex XXX to Association Agreement	Cost Indicators		% of amount
		Euro	UAH	
1	Environmental management	110600	1770000	0.3
2	Ambient air quality	6618500	105896000	19.2
3	Waste and Resources Management	1868500	29895700	5.4
4	Water quality and water management	22728700	363659800	66.0
5	Nature Conservation	2479000	39664000	7.2
6	Industrial pollution and man-made threats	345300	5524000	1.0
7	Climate change and protection of the ozone layer	210600	3370000	0.6
8	Genetically modified organisms	92600	1482000	0.3
	TOTAL	34453800	551261500	100

Source: (National Strategy of Ukraine's Legislation Approximation to EU Governance in Field of Protection of Environment, 2015)

The Europe 2020 strategy emphasizes smart, sustainable and inclusive growth as a way to overcome the structural weaknesses in Europe's economy, improve its competitiveness and productivity and underpin a sustainable social market economy. The Europe 2020 strategy is used as a reference framework for activities at EU, national and regional levels. EU governments have set national targets to help achieve the overall EU targets, and report on them as part of their annual national reform programs. Climate change and energy targets: greenhouse gas emissions 20% lower than 1990 levels, 20% of energy coming from renewables, a 20% increase in energy efficiency.

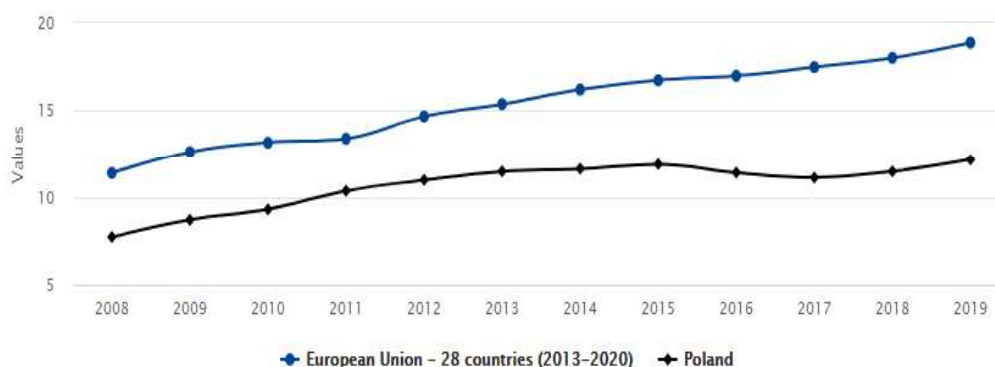


Figure 1. Share of renewable energy (% of gross final energy consumption)

Source: Europe 2020 targets: statistics and indicators for Poland (<https://ec.europa.eu>)

The EU statistics office, Eurostat, regularly publishes comprehensive progress reports for the targets. In 2014-15, the Commission decided to continue the strategy, monitoring and implementing it through a process known as the European Semester (Europe 2020 strategy – <https://ec.europa.eu>).

In the context of the resource and energy dependence of Ukraine, replacement of the “brown” industrial economy with the new “green” as a strategic priority gives a chance to ensure national security in the coming decades.

From 164 tasks for the environmental policy of Ukraine according to the EU Association Agreement, just 7% have been completed (12 tasks), uncompleted – 51% (85 tasks), not commenced – 40% (65 tasks) (*Table 5*).

Table 5. Term, obligations, tasks for environmental policy of Ukraine according to EU Association Agreement

Direction	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Water quality		1/1/0*	0/6/0	1/6/1	4/0/1	1/0/7	0/0/1	1/0/1		0/0/2	
Air quality		0/0/5	0/0/8	0/2/2	0/0/9	0/0/2			0/0/3		
Genetically modified		0/15/0	0/6/0								
Environmental management		3/8/0	0/9/0	0/0/1	0/0/2						
Nature protection	0/1/0	0/6/0		0/0/5							
Waste management			0/2/0		0/0/9	0/0/8					
Industrial pollution		1/0/0/			0/0/2						0/0/1
Climate change		0/15/0									

*completed/ uncompleted/ not commenced

Source: (<http://navigator.eurointegration.com.ua/tasks?type=chapter&id=environment>)

The non-government organization WDC-Ukraine (a full-member of the World Data System of the International Council for Science) in the project called “Foresight of Ukrainian Economy: mid-term (2015-2020) and long-term (2020-2030) time horizons”, made a complex of works to forecast the future Ukrainian economy for the mid-term and long-term. The 8 scenarios of the socio-economic development of Ukraine to 2030 were specified using the methodology of scenario planning and SWOT analysis. What is more, the ecological dimension of socio-economic development was determined (*Table 6*).

Table 6. SWOT analysis of ecologic dimension of Ukraine (expert interview)

Strengths	Weaknesses
<ul style="list-style-type: none"> - Attractive agricultural conditions - High level of biological and landscape diversity - Favorable natural and climatic conditions 	<ul style="list-style-type: none"> - High level of atmospheric air pollution - Low quality of drinking water - Ecologically dangerous ploughing of lands - High level of environmental pollution - Irrational management of waste, emissions, and discharges - Considerable carbon intensity of the economy - Low level of environmental protection legislation, ecological consciousness of the society, and ecologization of business
Factors determining opportunities	Factors determining threats to development
<ul style="list-style-type: none"> - Renewable energy as a component of energy production - Introduction of sustainable technologies of using and preserving energy and resources - Integrated legislative support of sustainable development policy implementation - Increase in investment in «green» economy 	<ul style="list-style-type: none"> - Deterioration of ecosystems as a result of anthropogenic activity - Negative impact of external adverse factors of technological origin on the environment - Insufficient implementation of a set of measures to improve the ecological condition of Azov and Black seas - Biotic invasion

Source: (<http://wdc.org.ua/sites/default/files/WDC-IASA-FORSIGHT-UA.pdf>)

In fact, for Ukraine as well as for any European country, there are two basic scenarios:

1. health, income, quality of life of the population,
2. the use of resources, wastes, pollution, environmental impact.

Obviously, essential new steps are needed; the transition to such development, which will solve the social, financial, fuel and climate problems in a complex way. According to scientists, the concept of a “green economy” can be a decision. In fact, until the recognition of the “green” economy as a mechanism for sustainable development, it remained the privilege of rich countries. UNEP defines the “green” economy as enhancing the welfare of people and providing social justice, while

significantly reducing the risks to the environment and increasing poverty among the population. The green economy model implies economic growth combined with environmental sustainability. The transition to such an economy can be provided by annual investments in the amount of 2% of world GDP (approximately \$ 1.3 billion) for 2012-2050. The conducted simulation showed that the scenario of “green” investments will provide higher annual growth rates than investments in business as usual in 5-10 years (UNEP 2011).

Improving the environmental situation ceases to be a line in the expenditure of the state budget, but becomes the very essence of the new economic system. That is, the state forms new economic conditions for doing business that attract investments in the development of new “green” industries and the ecological transformation (“greening”) of the traditional economy.

The annual turnover of the “green” economy in the EU is over 300 billion euros, equal to 2.5% of the GDP. It already employs around 3.4 million people, which is 1.5% of all those employed. A quarter of all investments are directed to pure technology. For example, wind energy has the maximum increase in investment compared to other sectors of the EU economy in recent years.

The benchmark for environmentalizing the Ukrainian economy has two dimensions – environmental modernization of the economy and the formation of new “green industries” of the economy.

The EU experience shows that the policy of sustainable development requires the coordination of efforts not only of state authorities, but also of a wide range of NGOs, the “green” business, environment experts and mass media. In Ukraine the policy of environmental behavior is implemented by NGOs. For instance, “Living Planet” systematically outfits measures aimed at implementing the tools of the “green” economy to the state-level management system. Not only NGOs and the formal education sector, but also commercial organizations, public administrations, industrial companies and corporations, trade unions, individually or in some form of public-private partnerships. New forms of sponsoring will complement the governmental support of environmental education. A variety of initiatives for sustainable development will call for a varied distribution structure.

At the European Union Conference on environmental education and training in Europe (Brussels, 1999) distribution channels were given as an example:

1. Departments of defense develop information campaigns on the environmentally friendly use of training areas for tank and troop maneuvers.
2. Local authorities have set up environmental communication departments.
3. Provincial governments develop their own social instruments. NGOs campaign on a number of issues.
4. Corporations start dialogues with the inhabitants of adjacent neighborhoods.
5. Networks of communication consultants provide services and develop new communication techniques.

The other important issue is the target group. The target groups of environmental policy are growing in number. Moreover, they are being approached on a smaller scale and with more focus on their own situation and possibilities. Youth are approached through their own media, in their own language. Employers are starting to

communicate to motorists in a business-like approach within the framework of the company's mobility plan. In the countryside, farmer's wives are confronted on the 'point of sale' with the choice for an environmentally friendly product. Tour operators are discovering increasingly more 'green' destinations to supply a growing market (*Environmental Education and Training in Europe, 1999*).

The weak points of the European environment policy can be identified based on extrapolation of the environmental education survey. Most respondents underline the intentions of the EC as stated in formal documents. The EC has not reacted adequately to new challenges. Only a limited number of experts and practitioners are familiar with the State of Affairs in member states. Many respondents find successful methods, materials, projects and programs difficult to access. Consequently, the potential of Trans-boundary learning is not fully used (*Environmental Education and Training in Europe, 1999*).

Therefore, Foresight methodology (which is a benchmark for EU members and non-members) should include in addition to a review of political, economic, social, technological and cultural events, which have happened by the exact year in the scenario, the following issues: the main gatekeepers in the scenario, distribution channels, modern challenges (such as Environmental Displacement (UNEP 2017), the speed of implementation, crisis management tools, taking into account the possibility of loss of trust to government, trans-boundary activities.

Conclusions

The agreement between Ukraine and the EU envisage the implementation of sustainable economic development and mechanisms of the "green" economy, which corresponds to the principles of implementing the strategy of sustainable development, adopted at the UN summit "Rio + 20". Realization of the EU sustainable development basics (the Treaty of Lisbon), such as peace, well-being, equality, price stability and a high level of environmental protection, is impossible without multi-level decisions.

To form a vision of a possible future, the Foresight methodology is proposed. Foresight enables one to build the desired future. Foresight enforces a holistic and systemic perspective.

The ecological statistics prove the experts' opinion that Ukraine has problems with waste management, renewable sources, as well as the level of atmospheric air pollution.

Ukraine is an example of a country that needs a new ecological consciousness. After all, environmental standards are not yet integrated either in everyday life or in sectoral policies, as in the European Union. Nevertheless, the national strategy of approximating Ukraine's legislation to the EU covers the whole range of enterprises, institutions and organizations involved in the implementation of Chapter 6 "Environment" and Annex XXX to the Association Agreement at the national, regional and local level.

It is important to understand that in any case, the transformation would not be simple and inexpensive process. For instance, the approximation of Ukrainian environmental legislation to the EU is connected with a number of procedural issues, the

development of new procedures and technical requirements, educational and informational activities, training programs as well as public awareness raising activities.

In fact, for Ukraine as well as for any European country, there are two basic scenarios:

1. health, income, quality of life of the population;
2. the use of resources, wastes, pollution, environmental impact.

Obviously, essential new steps are needed; the transition to such development, which will solve the social, financial, fuel and climate problems in a complex way. According to scientists, the concept of a “green economy” can be a decision.

Many countries use different tools of the “green economy” in their national policies and development strategies. The Europe 2020 strategy emphasizes smart, sustainable and inclusive growth as a way to overcome the structural weaknesses in Europe's economy, improve its competitiveness and productivity as well as underpin a sustainable social market economy. The Europe 2020 strategy is used as a reference framework for activities at EU, national and regional levels. EU governments have set national targets to help achieve the overall EU targets, and are reporting on them as part of their annual national reform programs.

In the context of the resource and energy dependence of Ukraine, replacement of the “brown” industrial economy with the new “green” as a strategic priority gives a chance to ensure national security in the coming decades. The EU experience shows that the policy of sustainable development requires the coordination of efforts not only of state authorities, but also of a wide range of NGOs, the “green” business, environment experts and mass media.

The weak points of the European environment policy: the intentions of the EC as stated in formal documents, inadequate reaction to new challenges, difficult access to methods, materials, projects and programs.

The Foresight methodology for the EU Environmental Protection and Policy (which is a benchmark for EU members and non-members) should include in addition to a review of political, economic, social, technological and cultural events, which have happened by the exact year in the scenario, the following issues: the main gatekeepers in the scenario, distribution channels, modern challenges, the speed of implementation, crisis management tools and take into account the possibility of loss of trust to government, in addition to trans-boundary activities.

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ZRÓWNOWAŻONY ROZWÓJ UKRAINY: UNIJNY BENCHMARK I METODOLOGIA FORESIGHT

Streszczenie: Głównym celem badawczym artykułu jest przedstawienie możliwej ścieżki zrównoważonego rozwoju na Ukrainie zgodnie z europejskimi trendami i celami. Aby sformułować wizję ukraińskiego ruchu na rzecz zrównoważonego rozwoju, proponuje się metodologię foresight. Unia Europejska i kraje rozwinięte gospodarczo są punktami odniesienia dla Ukrainy, ale zmiany gospodarcze i technologiczne prowadzące do celów zrównoważonego rozwoju w UE lub poza nią postępują zbyt wolno; potrzebna jest znacznie większa, głębsza i trwalsza zmiana w gospodarce i społeczeństwie. W artykule wyniki projektu „Foresight of Ukraine Economy: średnioterminowe (2015-2020) i długoterminowe (2020-2030) horyzonty czasowe” są wykorzystywane do określenia krytycznych czynników środowiska, mocnych i słabych stron, szans i zagrożeń dla dalszego zrównoważonego rozwoju na Ukrainie. Porównano także Ukrainę z krajami sąsiednimi – członkami UE i państwami niebędącymi członkami (według wskaźnika środowiskowej wrażliwości, wskaźnika wydajności środowiskowej, wskaźnika rozwoju społecznego). Wykorzystano dane z ukraińskiej agencji statystycznej oraz otwarte rankingi międzynarodowe. Podkreślono dwa podstawowe scenariusze możliwej i pożądanej przyszłości. Na koniec należy zauważyć, że metodologia foresight dla europejskiej polityki zrównoważonego rozwoju (która jest skalą dla członków UE i osób niebędących członkami) powinna obejmować (oprócz przeglądu wydarzeń politycznych, gospodarczych, społecznych, technologicznych i kulturalnych w scenariuszu) głównych aktorów, kanały dystrybucji, współczesne wyzwania, szybkość, narzędzia zarządzania kryzysowego i przekraczanie granic. Do analizy i wnioskowania wykorzystano metodę analityczno-syntetyczną oraz indukcyjno-dedukcyjną.

Słowa kluczowe: benchmark, otoczenie, metodologia foresightu, zrównoważony rozwój