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IDEOLOGICAL ADAPTATION OF THE SUSTAINABILITY CONCEPT: UNLOCKING POTENTIAL THROUGH SYSTEM PATTERNS?

Abstract. This article focuses on the theoretical and methodological adaptation of the sustainable development concept through implementing a more flexible and adaptive approach to management processes, harmonizing the relationship between government and market roles in promoting sustainability, maintaining balanced interests in multi-level interactions, and optimally unlocking the underutilized potential of human and social capital. The research aims to scientifically substantiate the possibility of rationally balancing the sustainability concept with national interests and using it as an integrative approach to constructing a new socio-economic model based on harmonizing self-regulation and management influence, which can accelerate metabolic and regenerative processes.

The author emphasizes that the fundamental principles of sustainable development – balancing economic growth, social justice, and environmental sustainability – remain extremely important and relevant to today's challenges. Despite the fragmentation in practical implementation that undermines trust in sustainability as an optimal practical approach, there remains an opportunity to unlock untapped potential by relying on balanced system patterns and self-regulation mechanisms. The author notes that transforming management approaches through flexible adaptation of the concept with national interests and aligning practical management approaches with system patterns will allow countries and regions not only to overcome current challenges more effectively but also to establish a foundation for strategic resilience and competitiveness. The article reveals the theoretical-analytical and systemic-methodological foundations for implementing a flexible and adaptive approach to sustainable development management as an optimal model that enables: alignment of multi-level goals and values, combining today's requirements (pragmatism and contextual orientation) with strategic principles of sustainability – optimality and rationality, adaptability and resilience.

Keywords: sustainable development, public administration, circular economy, green economy, digital economy, smart specialization, agile management, crisis management, economic policy.

Research Relevance. Until recently, the conceptual approaches to sustainable development dominated the global agenda as the optimal model for

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humanity's socio-economic transformation. They were widely accepted as the undisputed political and economic mainstream and considered the ideal practical crisis management model amidst uncertainty and turbulence. However, as the outcomes of the 2023 New York Summit on Sustainable Development Goals revealed: 'the path toward achieving these ambitious goals remains uneven, with persistent gaps in poverty eradication, climate action, and other critical areas' [42]. Despite concerted efforts, progress remains disjointed and fragmented, undermining confidence in sustainability as an optimal practical approach.

On one hand, the fundamental principles of sustainable development – the balance between economic growth, social justice, and environmental sustainability – remain profoundly important and relevant to contemporary challenges. Driven by the worsening climate crisis, increasing inequality, and resource constraints, the transition to more balanced and inclusive development models appears not merely desirable but vital for ensuring humanity's long-term stability and prosperity. In this context, abandoning sustainability principles in favour of short-term economic interests is undesirable at the global level and could have catastrophic long-term consequences.

On the other hand, the realities of today's world demand a more pragmatic and context-oriented perspective on sustainable development, even at the global level. Geopolitical turbulence, economic instability, and rising protectionism affect the social and economic sustainability of many countries, forcing governments to respond rapidly to crises and meet their citizens' basic needs. Under such circumstances, adherence to stringent environmental standards or implementation of long-term infrastructure projects typically becomes secondary to more pressing challenges. Moreover, the very principles of sustainable development face criticism today for being excessively abstract, detached from local realities, and insufficiently attentive to the specificities of different countries and regions.

The relevance of this research is underscored by the fact that sustainable development remains a globally unifying concept for socio-economic transformation. Rather than completely abandoning this paradigm, it requires adaptation to new challenges and realities by optimising the deployment of its adaptive potential. This may entail focusing on more rational, applied, and context-oriented approaches, such as circular economy, inclusive development, or smart regional specialisation, in synergistic combination with flexible governance mechanisms that consider local specificities and needs, engaging all stakeholders in dialogue and collaborative problem-solving. Scholars see the solution to this challenge in revising principles of rigid regulation towards flexibility, considering the interests of all process participants whilst ensuring a comprehensive approach and multi-level interaction to achieve internal balance.

The relevance is further strengthened by the fact that such a flexible and adaptive approach to sustainable development will preserve its fundamental principles and values whilst making it a more relevant and effective public policy instrument in conditions of turbulence and uncertainty. This will certainly require rethinking established approaches, greater openness to innovation and experimentation, and readiness for continuous learning and adaptation. However, this path will ensure resilience and prosperity in the long term, finding a balance between economic, social, and environmental development priorities.

The foundation for addressing contemporary issues of harmonising conceptual models of sustainable development in practical implementation builds on key principles of economic science established by A. Smith, D. Ricardo, J. Mill, T. Malthus, L. Walras, and C. Menger. Modern perspectives on adaptive approaches

to sustainable development within public governance systems are closely linked to complex systems theory and are reflected in the works of J. Forrester, A. Peccei, D. Meadows, J. K. Galbraith, A. Toffler, J. Gosling, F. Giovanni, H. Yoshikawa, J. Rundle, and J. Finn.

It should be noted that a significant critical shift in the perception and implementation of the sustainable development concept is currently taking place, driven by fundamental factors and supported by positions of authoritative scholars and institutions: B. Latour and D. Haraway (critique of anthropocentrism and ecomodernism), J. Hickel and T. Piketty (intensification of global inequality and injustice), W. Steffen (challenges of the Anthropocene and planetary boundaries), and S. Jasanoff (crisis of expert institutions). This scholarly trajectory encourages critical reconsideration of established approaches and the search for new, more inclusive, environmentally sensitive, and adaptive development models, emphasising open dialogue, interdisciplinary collaboration, and readiness for transformational change to overcome the sustainable development crisis and ensure a resilient and prosperous future for all.

Ideological and philosophical approaches to aligning the concept with national interests are highlighted in the works of numerous Ukrainian scholars, including O. Amosha, V. Antonyuk, V. Bogolyubov, O. and N. Vasilyev, Z. Gerasimchuk, L. Gryniv, I. Dunayev, M. Latynin, T. Lozynska, M. Mykolaichuk, L. Melnyk, V. Tregobchuk, O. Tsisemsky, and many others.

While acknowledging the contributions of both Ukrainian and international scholars regarding the influence of ideological, political, cultural, economic, and social factors on the practical implementation of sustainability approaches in socio-economic transformation processes and their balancing with national priorities, it should be noted that there is a notable absence of research examining the relationship between these characteristics and systemic patterns within the holistic framework of sustainable development.

The majority of existing research focuses on theoretical and methodological justification of mechanisms for managing sustainability processes, whilst neglecting the relationship between governance systems and approaches with the self-regulation of systems in adaptation processes. Studies emphasise the necessity of harmonising policy development and coordination procedures through defining common goals and pathways to achieve them, joint analysis and decision-making, collaborative calculation, fair redistribution, and coordinated resource-efficient use of the resource-material base for optimal resource reservation. However, there remains no clear answer on how to optimise and rationalise internal processes by enhancing positive and compensating for negative impacts of systemic patterns. Addressing this challenge remains relevant today, constituting a subject of scientific inquiry and forming the basis for developing a shared vision. Moreover, considering the growing resource scarcity and extent of destruction, resolving questions of rationality, optimality, and alignment with national interests through optimising internal system processes is extremely important for Ukraine's current national needs.

Problem statement and identification of unresolved issues. Examining key trends in countries' transition towards practical implementation of the sustainable development concept in national socio-economic systems, alignment of global and national interests, and factors that facilitate or hinder this process – as conditioned by political, economic, social, and cultural differences in relation to internal systemic patterns in key functional areas – allows us, through generalising the causes of discrepancies, to identify major trends and causal relationships

of imbalance, formulate hypotheses regarding managerial influence on resolving contradictions, and harmonise management mechanisms with systemic patterns to achieve desired outcomes.

Furthermore, studying factors that facilitate or impede the alignment of shared vision, based on a systems approach, allows us to identify their impact on the stability and flexibility of the system's internal structure, the balance of internal processes, and the quality and speed of information flow. Therefore, the primary task of this article is the theoretical-analytical identification of practical ways to overcome internal systemic contradictions and determine fundamental approaches to adaptation at the level of practical implementation of the sustainability concept in key functional areas.

Aim and tasks of the Article. The aim of this article is to scientifically substantiate the possibility of optimally balancing the sustainability concept with national interests and utilising it as an integrative approach to building a new socio-economic model based on harmonising self-regulation and managerial influence, which can accelerate metabolic and regenerative processes. This aim necessitates addressing the following objectives:

1) Clarify how systemic patterns influence adaptation processes of the sustainable development concept in national socio-economic systems of different countries.

2) Determine which factors facilitate or impede harmonisation of the sustainable development concept with national interests, and how these factors relate to internal system self-regulation processes.

3) Define how flexible and adaptive management approaches can contribute to overcoming internal systemic contradictions and enhancing the effectiveness of practical implementation of the sustainability concept.

Methodology applied. The research employs a comprehensive methodological strategy combining systemic, comparative, and institutional approaches. The systemic approach allowed for examining the sustainable development concept as a complex multi-level system of interconnected elements and processes, identifying key patterns of its functioning and adaptation [1; 4; 19; 27].

The empirical foundation of the research is formed from three types of sources: 1) official documents from international organisations (UN, OECD, World Bank) and national sustainable development strategies (2015-2025); 2) statistical data from international databases (World Development Indicators, SDG Indicators Global Database, Environmental Performance Index) for the period 2000-2023; 3) analytical reports from independent research centres and academic publications.

For data analysis, methods of policy comparison, institutional analysis, and case studies were applied. Comparative analysis was used to identify commonalities and differences in various countries' approaches to adapting the sustainable development concept. Institutional analysis enabled tracking the relationship between formal and informal institutions and the effectiveness of implementing sustainability principles. The case study method was applied for detailed examination of individual countries as representative examples of different adaptation models.

Key research concepts include: 1) adaptive potential of the system – the ability of a socio-economic system to accumulate and effectively utilise resources for adaptation to new conditions; 2) resilience – the system's ability to maintain stability during external and internal disturbances; 3) non-linear dynamics – consideration of complex interconnections and disproportionate system responses to external influences.

The sequential logic of the material presentation in this article is as follows:

1) Generalisation and systematisation of sustainable development adaptation as a model of socio-economic transformation in historical retrospective and in comparison, with sociocultural, political, and economic characteristics, identifying key factors that contributed to practical implementation success.

2) Correlation of key influence factors with manifestations of systemic patterns and system self-regulation processes, identifying approaches that promoted integrity and balance of the system structure, and alignment of the sustainability concept with national interests.

3) Identification of interdependence between harmonisation and alignment of self-regulation and management processes – the integrity and flexibility of the system structure and the quality of its adaptation in multi-level interaction.

4) Conceptualisation of approaches to building management processes to ensure ideological alignment of sustainability processes with national interests and overcoming the crisis of confidence in the sustainability concept.

Main Material. We begin the presentation of the main material by defining the key methodological concepts used in this article:

Systemic patterns are objectively existing, recurring, stable connections between system elements and processes occurring within it, which determine the functioning, development, and adaptation of the system to changes. In the context of sustainable development, systemic patterns manifest through interconnections between economic, social, and environmental components, determining their mutual influence and the integral dynamics of the entire system.

Emergence is a property of the system whereby its integral characteristics cannot be reduced to the sum of its components' properties but arise through the synergistic interaction of these components. In the sustainable development system, emergence manifests in the appearance of new qualities and effects during balanced integration of economic, social, and environmental subsystems, which could not arise during their isolated functioning.

Self-organisation is the ability of complex systems to spontaneously transform their internal structure and processes in response to external and internal influences to achieve new equilibrium states without external directive management. In the context of sustainable development, self-organisation reflects adaptation processes through which socio-economic systems respond to challenges and opportunities associated with the sustainability concept, forming new structural interconnections between economic, social, and environmental components.

From its inception, the sustainable development concept had a global character and was directed at harmonising economic growth, social development, and environmental protection on a planetary scale, emerging as a response to challenges humanity faced at the end of the 20th century (depletion of natural resources, environmental pollution, poverty, inequality, etc.). For most developed countries, the sustainable development concept became relevant with its formation at the global level in the 1970s, responding to growing awareness of environmental problems and the planet's resource limitations. However, for most African and Asian countries, which at that time were struggling with poverty and striving for economic development, these ideas were not yet a priority.

The Earth Summit in Rio de Janeiro in 1992 marked a turning point, with the adoption of a declaration outlining 27 principles of sustainable development and "Agenda 21». This established a global framework for integrating economic development, social inclusion, and environmental protection. In subsequent years,

countries began gradually incorporating sustainable development principles into their national strategies and policies, albeit at different paces and to varying extents, laying the foundation for a global vision of sustainable development. This process was facilitated by both internal factors (growing public awareness, civil society pressure, politicians' desire to align with the global agenda) and external ones (requirements from international organisations and donors, aid conditionality tied to reforms) [7].

Trust in the sustainable development concept today depends, more than ever, on how successfully economic, social, and environmental goals can be balanced and priorities reconciled between individual countries in practical implementation – finding consensus in values and key interests between global needs and the demands of national socio-economic systems, between developed and developing countries [5; 25]. Although a certain consensus exists at the global level regarding the importance of sustainable development, in practice, its understanding and priorities differ significantly across countries depending on their level of economic development, culture, values, and interests (Table 1).

Table 1. – Typical approaches to understanding the sustainable development concept.

Country	Priority	Attitude toward sustainable development	Key policies and slogans
Western developed countries (EU, USA)	Environmental sustainability	Active promotion, emphasis on "green» economic transformation	"Green Deal", climate neutrality, circular economy
China	Economic growth and poverty alleviation, with gradual "greening"	Dual approach: rapid development + environmental goals	"Ecological civilisation", carbon neutrality by 2060
Developing countries (India, Brazil, Africa)	Combating poverty and socio-economic development	Development priority, cautious approach to environmental constraints	"Right to development»" fair distribution of responsibility
Conservative oil-producing countries (Saudi Arabia)	Preserving status quo based on fossil fuels	Sceptical attitude, fears of losing rent	Economic diversification but without rapid abandonment of oil

**Source: author's development.*

Таблиця 1. – Типові підходи до розуміння концепції сталого розвитку.

Країна	Пріоритет	Ставлення до концепції сталого розвитку	Ключові політики та гасла
Розвинені країни Заходу (ЄС, США)	Екологічна сталість	Активне просування, акцент на «зеленій» трансформації економіки	«Зелений курс», кліматична нейтральність, циркулярна економіка
Китай	Економічне зростання і подолання бідності, але з поступовим «озелененням»	Дуальний підхід: швидкий розвиток + екологічні цілі	«Екологічна цивілізація», вуглецева нейтральність до 2060
Країни, що розвиваються (Індія, Бразилія, Африка)	Боротьба з бідністю і соціально-економічний розвиток	Пріоритет розвитку, обережне ставлення до екологічних обмежень	«Право на розвиток», справедливий розподіл відповідальності
Консервативні нафтовидобувні країни (Саудівська Аравія)	Збереження статусу-кво, заснованого на викопному паливі	Скептичне ставлення, побоювання втрати ренти	Економічна диверсифікація, але без різкої відмови від нафти

**Джерело: розробка автора.*

Western developed countries, particularly the EU and USA, approach sustainable development primarily from an environmental perspective [43]. They view the economy and environment as interconnected spheres and strive to make economic growth "green" (resource-efficient and low-carbon), which is reflected in their policies, for example:

1) The EU has set ambitious targets for reducing greenhouse gas emissions to combat climate change. The EU has committed to achieving climate neutrality by 2050 [35].

2) The European Union's "Green Deal", announced in 2019, entails a profound transformation of the economy based on circularity and renewable energy [36].

3) Germany is implementing Energiewende – a transition to renewable sources whilst phasing out nuclear and coal power generation [2; 12].

4) In the USA, the concept of the Green New Deal – a large-scale "green" modernisation of the economy—was until recently gaining popularity [37].

At the same time, the social component in the Western understanding of sustainable development is somewhat less prominent. Although tackling poverty and inequality is also on the agenda, environmental priorities still predominate.

In contrast, developing countries place greater priority on poverty eradication and socio-economic issues. For them, rapid economic growth is often more important than environmental considerations. The sustainable development concept is perceived with certain reservations, as something that might limit their development opportunities [6, 24]. For example:

– China, the world's largest emitter of greenhouse gases, has long prioritised poverty reduction, industrialisation, and economic growth. Although China now also sets ambitious climate goals (achieving carbon neutrality by 2060), in practice it continues to build coal-fired power plants [22].

– India, where a significant portion of the population still lacks access to electricity, advocates for the "right to development" and fair distribution of global environmental responsibility, considering countries' different historical contributions to climate change [34].

– In Africa, where poverty, hunger, and disease are pressing problems, poverty eradication is often cited as the priority for sustainable development. As Ethiopia's Prime Minister Meles Zenawi said, "We must first escape the poverty trap before we can talk about a green economy" [17].

– Saudi Arabia, a conservative society where the sustainable development concept contradicts traditional values and a way of life based on fossil fuel extraction and consumption.

Despite the sustainable development concept remaining relevant on the global agenda, its practical implementation encounters a series of systemic contradictions between national and global interests in social, economic, and environmental subsystems:

– Different understandings of priorities in objectives, conditioned by differences in levels of economic development, political systems, culture, and resource potential, which influences the formation of divergences in national interests;

– Different visions of balance and development vector at all levels of practical implementation and alignment with the global agenda and global economic processes;

– Discrepancies in the timeframe for achieving sustainability components, access to resources, and the actual (rather than declarative) creation of an equal opportunities environment.

– The foundation for aligning sustainable development priorities with national interest is established in addressing issues of:

– A country's economic sustainability – determined by the country's economic interests, it enables unlocking and accumulating the necessary adaptive potential for social sustainability;

– Socio-cultural balance of the national system – through ensuring living standards, it reveals opportunities for promoting the idea of conscious consumption;

– Environmental orientation – through the genesis of components and system emergence.

In this context, societal alignment and fiduciary influence on ordering processes occur either under pressure from market self-organisation mechanisms (to realise the goal-achievement function) or based on the normative influence of political factors (to form sustainability based on the traditional hierarchical model). These are determined by the timing of a country's transition to practical implementation, forms of implementation into national socio-economic systems, depending on political, social, and cultural specifics and established models of economic relations (Table 2).

Even for Western developed countries, reconciling and adapting sustainable development within national socio-economic systems remains somewhat imbalanced: on one hand, the priority of the environmental component is declared at the state level, around which economic processes (green, circular economy models) and social sustainability (conscious consumption as a guarantee of high living standards) are built. On the other hand, there is the need for economic sustainability as a priority of market-based economic models, determined by the patterns of system self-regulation [33].

Even greater fragmentation and inconsistency in national sustainable development policies can be observed in developing countries.

In China, the sustainable development concept began gaining significance in the 1990s when the country faced serious environmental problems due to rapid industrialisation. In 1994, the government published "China's Agenda 21» – the first national sustainable development strategy. In subsequent years, these principles were integrated into five-year development plans and sectoral policies. The 11th Five-Year Plan (2006-2010) played a particularly important role, setting for the first time the task of reducing GDP energy intensity and developing renewable energy. However, in practice, economic growth and industrialisation still had priority. Only in the last decade, with increasing international pressure regarding climate change and China's announcement of carbon neutrality goals by 2060, has the "green» agenda become more significant, though it still combines with the traditional development model [38; 39].

In India, too, the transition to sustainable development occurred gradually [20; 21]. On one hand, there have always been strong traditions of harmony with nature, rooted in culture and religion. On the other hand, a huge and growing population and poverty demanded prioritisation of economic development. The first attempts to form a national environmental policy date back to the 1970s, but they were limited in scope. A more systematic approach began to form in the 2000s. In 2006, the government approved the National Action Plan on Climate Change, and in 2008, the National Mission for a Sustainable Environment. These included measures to improve energy efficiency, develop renewable energy, and sustainably manage water and forest resources. However, implementing these plans faced many challenges – from underfunding to conflicts with other development priorities.

Table 2. – Characteristics and trends in the transition to the sustainable development concept

Country/ region	Beginning of transition to sustainable development	Main influencing factors	Trends facilitating transition	Trends hindering transition
USA, EU	1970s	Environmental problems resulting from rapid industrialisation, formation of a new consumption culture	Awareness of environmental problems and limited planetary resources	Priority of economic growth
China	1990s	Environmental problems resulting from rapid industrialisation, directive role of the state	Increasing international pressure regarding climate change	Priority of economic growth, energy security
India	2000s	Cultural traditions of harmony with nature, energy security, civil society pressure	Development of renewable energy to ensure energy access and reduce import dependence	Immense poverty and inequality, institutional weakness
Middle East (Saudi Arabia, UAE)	2010s	Falling oil prices, pressure from the international community	Desire to diversify the economy and sources of regime legitimacy	Role of oil rent as the foundation of the social contract
Africa (exemplified by South Africa and Nigeria)	2000s with significant variations across countries	Environmental and climate changes, energy poverty, institutional weakness	Pressure from civil society and donors	Priority of poverty eradication, conflicts, corruption

**Source: author's development.*

Таблиця 2. – Особливості та тенденції переходу до концепції сталого розвитку

Країна/ регіон	Початок переходу до сталого розвитку	Головні фактори впливу	Тенденції, що сприяють переходу	Тенденції, що гальмують перехід
США, ЄС	1970-ті роки	Екологічні проблеми внаслідок швидкої індустріалізації, формування нової культури споживання	Усвідомлення екологічних проблем та обмеженості ресурсів планети.	Пріоритет економічного зростання
Китай	1990-ті роки	Екологічні проблеми внаслідок швидкої індустріалізації, директивна роль держави	Зростання міжнародного тиску в зв'язку зі зміною клімату	Пріоритет економічного зростання, енергетична безпека
Індія	2000-ні роки	Культурні традиції гармонії з природою, енергетична безпека, тиск громадянського суспільства	Розвиток відновлюваної енергетики для забезпечення енергодоступу та зменшення залежності від імпорту	Величезна бідність та нерівність, інституційна слабкість
Близький Схід (Саудівська Аравія, ОАЕ)	2010-ні роки	Падіння цін на нафту, тиск міжнародної спільноти	Прагнення диверсифікувати економіку і джерела легітимності режимів	Роль нафторенти як основи суспільного договору
Африка на прикладі ПАР та Нігерії	2000-ні роки з великими варіаціями по країнах	Екологічні та кліматичні зміни, енергетична бідність, слабкість інститутів	Тиск з боку громадянського суспільства та донорів	Пріоритет подолання бідності, конфлікти, корупція

**Джерело: розробка автора.*

Energy policy was a key factor influencing India's transition to sustainable development. On one hand, the country heavily depends on fossil fuel imports, creating energy security risks. On the other hand, renewable energy development (particularly solar) has become a priority in the last decade as a means to simultaneously ensure energy access, reduce import dependence, and cut emissions. India set ambitious targets to achieve 175 GW of renewable capacity by 2022 and 450 GW by 2030. The rapid growth of "green» energy in India in recent years has become one of the factors accelerating the transition to sustainable development [18].

For oil-producing countries in the Persian Gulf, such as Saudi Arabia or the UAE, the transition to sustainable development is particularly challenging as it requires fundamental transformation of economic models and power balances. Oil is not merely the main source of income here but also the foundation of the social contract between ruling regimes and the population. Abandoning it carries risks for the stability of these regimes.

For a long time, these countries moved very slowly and reluctantly towards economic diversification and renewable energy development. The first attempts in this direction were made only after oil prices fell in 2014, which painfully impacted these countries' budgets. The UAE announced its intention to increase the share of "clean» energy to 50% by 2050, while Saudi Arabia launched a solar and wind energy development programme as part of its "Vision 2030» reform plan. However, these efforts remain partial and do not signify abandonment of fossil fuels. For example, Saudi Arabia aspires to become a global leader in "green» hydrogen production and export but plans to produce it from natural gas (albeit using carbon capture technologies) rather than renewable sources. This demonstrates the authorities' desire to combine new "green» rhetoric whilst preserving traditional sources of rent and power [14; 38].

In Africa, the transition to sustainable development is occurring even more slowly and with greater fragmentation [9] than in Asia. For most countries on the continent, combating poverty, hunger, disease, and conflicts remains the main priority, while environmental sustainability issues are perceived as a luxury. Additionally, weak state institutions, corruption, lack of funding, and technologies complicate the implementation of sustainable development policies. South Africa is attempting to implement the sustainable development concept most consistently. As early as 1996, a Constitution was adopted here guaranteeing the right to a clean environment (one of the few constitutions in the world where environmental rights are specified separately). In 2008, the South African government launched an ambitious programme to develop a "green economy», and in 2011 adopted a National Sustainable Development Strategy through 2030. However, these efforts face opposition from traditional industries (primarily extractive), competing priorities (the need to rapidly create jobs to address high unemployment and inequality), and institutional barriers (fragmentation of functions between different agencies, lack of coordination). As a result, progress is slower than declared in strategic documents. For most other African countries, the transition to sustainable development is not yet a priority [16]. For instance, Nigeria, the continent's largest economy, still lacks even a climate protection law, although climate changes (such as the Sahel desert expansion) are already causing damage to the country. Renewable energy development plans remain largely on paper, and fossil fuels and traditional biomass still dominate the energy mix.

On one hand, over the past 30 years, undeniable progress has occurred in recognising the interconnectedness of economic development, social inclusion, and environmental conservation – more countries are integrating sustainable development goals into national strategies and policies. Combating climate change and transitioning to clean energy have become global mainstream imperatives that even the most conservative countries cannot ignore.

On the other hand, this process remains uneven, contradictory, and fragmented, violating the main principle of sustainability – harmonious development of component subsystems:

– In developed countries, the transition to sustainable development faces, on one hand, the priority of economic growth as the foundation for social and environmental systems' sustainability, which can only be ensured by competitive market positions; on the other hand, excessive focus on environmental issues is gradually becoming a threat factor for national socio-economic systems and creates threats to the sustainability of the economic component and, consequently, to the sustainability of social systems, reinforcing the crisis of confidence in the approach's ability to address global problems.

– In most developing countries, it encounters fundamental limitations in the form of mass poverty, social inequality, dominance of traditional economic sectors, weak democratic institutions, and lack of resources and technologies. Furthermore, the transformation of socio-political systems lags behind technological and discursive transformation: even where sustainable development strategies and plans exist, their practical implementation is often blocked by existing balances of power and interests.

The sustainability concept is primarily a human-oriented approach that emerged and develops in the interests of present and future generations, conceptualised and implemented by people. In view of this, studies of the impact of sociocultural characteristics on the implementation of the sustainability concept using African and Asian countries as examples (Table 3) allow us to highlight the significance of social sustainability (higher levels of poverty, social inequality, and problems with access to basic goods) [29] in the overall balance of the concept and identify additional intangible resources for practical adaptation.

From a systems perspective, the pattern of spontaneous system ordering (the set of institutional components' actions towards creating self-regulation mechanisms to ensure equilibrium around macroeconomic parameters and indicators (F. Hayek)) brings the socio-economic dimension to the forefront – as the foundation for internal processes' sustainability (the need to overcome poverty, create jobs, develop infrastructure, etc., for African and Asian countries). Environmental problems, though recognised as important, often take a back seat.

In Nigeria, Africa's most populous country, about 40% of people live below the poverty line. Therefore, Nigeria's Sustainable Development Strategy through 2030 primarily emphasises economic growth and "inclusive development» that would extend the benefits of growth to all population segments. The environmental agenda here is less ambitious – it provides for minimising the negative impact of economic activities on the environment but without radical steps such as decarbonisation.

In South Africa, which has a more developed economy but also suffers from high poverty and inequality levels, the vision of sustainable development is based on the concept of "just transition» [28]. It envisions a gradual transition to a "green» low-carbon economy, but with emphasis on social justice, creating "green» jobs, and avoiding unfair burdens on poorer population segments [10].

Table 3. – Influence of sociocultural characteristics on practical implementation of the sustainable development concept

Country/region	Key features of approach to sustainable development	Position of ecology among priorities	Influence of cultural-political characteristics
Africa (Nigeria and South Africa examples)	Emphasis on poverty eradication and socio-economic development, "just transition» concept	Lower than socio-economic issues	Traditional ways of life, high poverty and inequality
Middle East (Saudi Arabia, UAE)	Gradual economic diversification whilst maintaining oil's role, balancing environmental and traditional principles	Moderate, subordinated to maintaining the status quo	Oil as part of identity, need for regime legitimisation
India	Combination of traditional views (ahimsa, sarvodaya) with development realities, demand for justice	High at the philosophical level, but lower in practice	Deep cultural traditions, significant role of informal economy

**Source: author's development.*

Таблиця 3. – Вплив соціо-культурних особливостей на практичну імплементацію концепції сталого розвитку

Країна/регіон	Ключові риси підходу до сталого розвитку	Місце екології серед пріоритетів	Вплив культурно-політичних особливостей
Африка на прикладі Нігерії та ПАР	Наголос на подоланні бідності та соціально-економічному розвитку, концепція "справедливого переходу»	Нижчий, ніж соціально-економічні питання	Традиційні устрої життя, висока бідність і нерівність
Близький Схід (Саудівська Аравія, ОАЕ)	Поступова диверсифікація економіки при збереженні ролі нафти, балансування екологічних і традиційних засад	Помірний, підпорядкований збереженню статус-кво	Нафта як частина ідентичності, потреба легітимації режимів
Індія	Поєднання традиційних поглядів (ахімса, сарводайя) з реаліями розвитку, вимога справедливості	Високий на рівні філософії, але нижчий на практиці	Глибокі культурні традиції, велика роль неформальної економіки

**Джерело: розробка автора.*

In many African and Asian countries, traditional social structures, values, and ways of economic management remain strong and may conflict with sustainable development ideas in their Western interpretation [16].

For example, in Persian Gulf countries such as Saudi Arabia or the UAE, oil is not just an economic resource but also part of national identity and the social contract between ruling regimes and the population. Abandoning oil here is seen not only as a threat to economic interests but also as a challenge to the established socio-political order. Although these countries are beginning to take steps towards economic diversification and renewable energy development (for example, within Saudi Arabia's Vision 2030 plan), they are not ready to completely abandon fossil fuels in the foreseeable future. Their approach to sustainable development aims to balance new environmental requirements with traditional economic and socio-political foundations.

In India, the sustainable development concept intertwines with deeply rooted cultural and religious notions of harmony between humans and nature. The idea of ahimsa (non-violence), inherent in Hinduism, Buddhism, and Jainism, resonates with principles of environmental ethics. The Gandhian concept of sarvodaya (welfare for all) aligns with the idea of inclusive sustainable development. In Indian philosophy, humans are viewed not as masters but as part of nature, meant to live in harmony with it. However, in practice, India faces serious challenges in reconciling these lofty principles with the realities of rapid economic development, urbanisation, population growth, and consumption [11]. Like other developing countries, it emphasises its right to development and the need for fair distribution of global responsibility for environmental problems, considering countries' different historical contributions [8].

The specifics of political systems in some African and Asian countries (single-party dominance, authoritarian tendencies, weak democratic institutions) influence the formation of the sustainable development agenda and its implementation [29]. In China, for example, the environmental agenda is largely defined and implemented in a directive manner by the Communist Party state. The concept of "ecological civilisation», declared as a goal in party documents, reflects a combination of an authoritarian approach with traditional Chinese views on harmony between humans and nature. Within this framework, large-scale state projects are implemented, such as urban greening or electric transport development. However, the space for bottom-up initiative, civil society, and local communities remains limited.

Finally, regional geopolitical tensions and conflicts influence the understanding of sustainable development in Africa and Asia [29]. For example, tense relations between India and Pakistan, where even issues of water resource distribution take on a character of "securitisation», complicate the full implementation of integrated natural resource management principles. Armed conflicts in Syria, Yemen, and Libya push long-term sustainability issues to the background in the face of humanitarian crises.

Examining key political, ideological, and energy factors that facilitated or hindered the transition to the sustainable development concept allows us to identify several systemic characteristics that became decisive for implementing conceptual approaches in national socio-economic policies and were based on patterns of obtaining additional resources to ensure sustainability and development process dynamics [40]:

– Economic growth and industrialisation (as China's key national interest) are combined through the sustainable development concept as opportunities for: access to international markets, integration into global value chains creating additional added value, practical implementation of social responsibility principles and social sustainability;

– Energy independence of the national economy (India's successful experience), with the sustainable development concept as an opportunity to reduce dependence on imported fossil fuels and practically implement the sociocultural tradition of harmony with nature;

– Economic diversification of income sources (Persian Gulf countries), with the sustainable development concept as an opportunity to reduce national economic dependence on fossil fuel price fluctuations, form a new social contract ensuring the existing power-society balance, based on social sustainability;

– Social sustainability and security factor (African countries), with the sustainable development concept as access to food resources and grant funding sources for national programmes.

It should be noted that while such characteristics are most relevant for developing countries, they are also characteristic of Western developed countries during periods of crisis and upheaval. Moreover, their effects may intensify with increasing uncertainty and turbulence. From the perspective of systemic patterns for national socio-economic systems, what is decisive is, on one hand, the system's orientation towards self-organisation (the ability to reach a qualitatively new development level, adapting to changing conditions whilst maintaining stability and resilience), and on the other hand, the duality of nature (combining a tendency towards increasing entropy with the desire to compensate for entropic tendencies and choose a "soft» path of evolution). The foundation of system equifinality is established in a balanced combination of values, goals, and their alignment with national priorities, while the adaptive resource for harmonious transformation is formed in the economic component and implemented with the involvement of actors and supporters – the social component.

Although Western countries have higher levels of economic prosperity and potential for ecologisation, this does not exempt them from profound challenges and contradictions on the path to sustainable development (Table 4), both in ideological and fiduciary as well as societal dimensions of functioning. On one hand, many of them are locomotives of "green» innovations and formation of the global environmental agenda. On the other hand, they face inertia from traditional business models, political polarisation, and conflicts between national and international obligations, which creates and reinforces negative fluctuations at the global level. The success of the global "green» transition will depend precisely on how well developed countries can transform themselves.

One of the key contradictions that all countries must overcome on the path to sustainable development is the conflict between short-term and long-term goals. On one hand, environmental care, combating climate change, transitioning to renewable energy sources, etc., require significant investments and efforts now, while their fruits will manifest primarily in the future. On the other hand, governments and businesses face urgent challenges – the need to stimulate economic growth, maintain employment, fill budgets, etc.

Currently, one of the main ways to reconcile contradictions from a systems approach perspective is through mechanisms built on feedback loops, which in the process of stimulating implementation of the sustainability concept are based on one hand on encouraging responsibility, and on the other hand on controlling results (McGregor's theory). For developing engagement among process participants, the action of two complementary mechanisms should be considered:

– Stimulating mechanism: the system avoids independent satisfaction of needs, so it is necessary to stimulate it to realise these needs through various methods—from support to punishment; avoidance of achieving specific needs (social, economic, or environmental) is explained by their contradictions with each other.

– Motivating mechanism: the system seeks to take responsibility for satisfying specific needs (social, economic, and environmental) to achieve sustainable development.

Table 4. – Internal contradictions in implementing the sustainable development concept

Dimensions of interest coordination	EU	USA	Japan	Scandinavian countries
Balance of short-term and long-term goals	«Just transition» for coal regions as a compromise with decarbonisation	Support for "green» investments alongside fossil fuel subsidies	Long-term vision within the Green Growth Strategy based on traditions of frugality	Triple win: emissions reduction, economic and employment growth, social cohesion
Role of state and market	Strong supranational regulation alongside market instruments and business initiatives	Leading role of private sector and financial markets with limited federal regulation	State-corporate partnership based on voluntary agreements and "soft» regulation	Active state role in creating framework conditions and incentives for "green» market behaviour
National and global levels	Leadership in global climate policy, alignment of trade with environmental and social standards	Selective participation in international agreements with priority given to national economic interests	Balance between global competitiveness and responsibility, "green» aid initiatives	Combination of ambitious domestic policy with active international cooperation and leadership
Development of human and social capital	Investments in education, retraining, social protection as part of the European Green Deal	Development of STEM education and "green» skills training, but in conditions of inequality and underinvestment in social sphere	Traditions of lifelong learning, corporate social responsibility, cross-sectoral partnerships between government, business, and civil society	Universal social policy, lifelong learning investments, development of "green» competencies as the foundation for society's resilience and cohesion

**Source: author's development.*

Таблиця 4. – Внутрішні протиріччя впровадження концепції сталого розвитку

Виміри узгодження інтересів	ЄС	США	Японія	Скандинавські країни
Баланс коротко- та довгострокових цілей	«Справедливий перехід» для вугільних регіонів як компроміс з декарбонізацією	Підтримка "зелених» інвестицій поряд з субсидіями викопному паливу	Довгострокове бачення в рамках Стратегії зеленого зростання на основі традицій ощадливості	Потрійний виграш: зниження викидів, зростання економіки та зайнятості, соціальна згуртованість
Роль держави та ринку	Сильне наднаціональне регулювання поряд з ринковими інструментами та ініціативами бізнесу	Провідна роль приватного сектору та фінансових ринків при обмеженому федеральному регулюванні	Партнерство держави та корпорацій на основі добровільних угод та "м'якого» регулювання	Активна роль держави у створенні рамкових умов та стимулів для "зеленої» поведінки ринку
Національний та глобальний рівні	Лідерство в глобальній кліматичній політиці, узгодження торгівлі з екологічними та соціальними стандартами	Вибіркова участь в міжнародних угодах з пріоритетом національних економічних інтересів	Баланс між глобальною конкурентоспроможністю та відповідальністю, ініціативи "зеленої» допомоги	Поєднання амбітної внутрішньої політики з активною міжнародною співпрацею та лідерством
Розвиток людського та соціального капіталу	Інвестиції в освіту, перекваліфікацію, соціальний захист як частина Європейського зеленого курсу	Розвиток STEM-освіти та підготовки "зелених» навичок, але в умовах нерівності та недоінвестування соціальної сфери	Традиції безперервного навчання, соціальної відповідальності корпорацій, кроссекторальних партнерств влади, бізнесу та громадянського суспільства	Універсальна соціальна політика, інвестиції в освіту впродовж життя, розвиток "зелених» компетенцій як основа стійкості і згуртованості суспільства

**Джерело: розробка автора.*

The stability of feedback structures between the goal formulation phase and how goals are evaluated and perceived by society [44] typically relies on content theories of motivation when defining the hierarchy of needs and on process theories when addressing the issue of expanding inter-institutional cooperation and defining sustainable development incentives.

It is worth noting that the sustainable development concept is inherently holistic and integrative – it seeks to combine three dimensions of development (economic, social, and environmental), which were previously often considered separately or even as competing. This requires rethinking approaches to management, regulation, and coordination of actions by various entities (state, business, civil society, science, etc.), which is determined primarily by the pattern of hierarchical system ordering. From a systems perspective, such internal transformation is determined by the pattern of interaction between parts and the whole of the sustainable development system: on one hand, the emergence of the system as a holistic formation, and on the other hand, additivity as an antithesis to the separability and independence of components, the summing of their impact on system viability.

Western developed countries, despite higher prosperity levels, are not exempt from this dilemma. For example, the EU's ambitious plans for energy decarbonisation by 2050 [35] face resistance from countries that significantly depend on the coal industry, such as Poland or Germany. To reconcile divergent interests, Brussels has been forced to make concessions and compromises, such as allocating significant funds for the "just transformation» of coal regions to mitigate the social consequences of the "green» transition.

Similar problems confront the USA, where there is no consensus on climate policy at the federal level. The Biden administration has had to navigate between the progressive wing of the Democratic Party, which demands decisive decarbonisation steps, and moderate Democrats and Republicans who fear negative impacts on the economy and jobs. The result has been compromised solutions such as the Inflation Reduction Act, passed in 2022, which provides for significant investments in "clean» energy but also contains concessions to the oil and gas industry.

Another important dimension of contradictions is the relationship between the state and market roles in promoting sustainable development [15]. On one hand, the scale and long-term nature of environmental challenges require strategic vision and a coordinating role for the state. On the other hand, in conditions of globalisation and rapid technological change, the flexibility and innovation of the private sector are also critically important.

Different countries approach this balance differently. For instance, in the EU [35], there is traditionally a high role for supranational regulation and establishment of common standards. However, this does not exclude active business participation – both through lobbying mechanisms and protection of their interests, and through voluntary initiatives in corporate social responsibility and "green» investment. A notable example is the European Climate Pact – a platform for cooperation between government, business, and civil society in implementing the EU Green Deal.

In the USA, conversely, the private sector plays a leading role in "green» transformation, especially in technological innovations [13]. Giants such as

Apple, Google, Microsoft, and Amazon have committed to ambitious goals for decarbonising their operations and supply chains. At the same time, the role of the financial sector is growing: the market for "green" bonds and other responsible investment instruments in the USA already exceeds $1 trillion. But this does not negate the need for state regulation to create a level playing field and prevent "greenwashing».

According to American institutionalists, organisations primarily adopt ideas to strengthen their legitimacy, follow management fashions, or change through normative factors (enhancing social justice or responding to democratisation demands) [26]. The retrospective trajectory of public sector reform research proves that new ideas often "overlay" the original bureaucratic logic, leading to the coexistence of several institutional logics or organisational forms within a single organisation [26]. This approach is founded on the principle of soft and gradual implementation of changes, based on the effect of diffuse penetration and the virality of innovations.

Another dimension of interest coordination is the relationship between national and global levels of sustainable development policy. In the context of globalisation, no country can independently cope with challenges such as climate change, biodiversity loss, ocean pollution, etc. This requires coordinated efforts and adherence to common rules at the international level, which often conflicts with national economic interests.

The difficult negotiations on implementing the Paris Climate Agreement serve as a telling example, during which developed countries committed to financial and technological support for developing countries in exchange for more ambitious emission reduction targets. However, the actual scale of this support still falls short of promises, undermining trust between the Global North and South [15].

Finally, a key factor in ensuring the resilience and adaptability of socio-economic systems during the "green» transition is the development of human and social capital. This involves investments in education, science, innovation, healthcare – everything that shapes society's readiness for change and its ability to creatively adapt to new challenges.

In this sense, the experience of Scandinavian countries is instructive, as they combine high environmental standards with strong social policies and investments in human potential development. For example, Sweden introduced a carbon emissions tax in the 1990s, with revenues directed towards reducing labour taxes and supporting low-income population groups. This has significantly reduced emissions, stimulated the transition to "clean" technologies, and simultaneously strengthened social cohesion.

Alignment and implementation of changes based on Scandinavian institutionalism and adaptation theories [26], unlike traditional diffusion models of new idea penetration (which perceive innovations as static entities), emphasise the importance of social dynamics, sociocultural features, and local values that ideas encounter during their genesis and circulation [30]. This suggests that the same idea can create different versions during its adaptation to the social environment when it enters a local context and can form the basis for engaging the maximum number of participants who actively transfer, rethink, and reconfigure innovations and new organisational elements in their specific organisational and cultural context. "When the concept and goals of management and the local

context align well, and managers have sufficient hierarchical authority to control the adaptation process, implementing innovations becomes a viable strategy, and adaptation under such circumstances becomes more a matter of transforming the organisation rather than the adopted concept» [26].

From a systems approach perspective, such hierarchical alignment allows the process of developing and coordinating goals among all participants to become a constructive core in a multi-level governance system, stimulating transformational changes in governance structures, decision-making processes, and citizen engagement strategies, adding flexibility, speed, and effectiveness to policy and strategic economic processes. This optimises the process of achieving results through increasing positive fluctuations, building it on principles of rationalisation and pragmatism (societal alignment), which contributes (based on system viability patterns) to qualitative and positive reinforcement of system patterns:

– system equifinality – the ability to achieve results independent of time and initial conditions, determined by internal system parameters;

– system variety – the diversity and flexibility of the controlling system should exceed the diversity and flexibility of the controlled system;

– potential system adaptability – system viability under external stimuli;

– potential system optimality – choosing a development trajectory along the path of least resistance;

– potential system effectiveness – transforming material-energy flow into a new product and obtaining additional energy.

Moreover, flexible hierarchy of the internal structure and system processes (as a reflection of energy flow ordering), combined with adaptive ordering and stability of communicative interaction, structuring of external interconnections (as channels for information flow passage) promotes “soft” evolutionary changes of subsystem components at all levels. Influence on the intensity and direction of information flow generates positive internal system fluctuations and adjusts its connections with the external environment, compensating for negative influences.

Hierarchical structuring can compensate for imbalance, which is based on the dissipative structure of the system, reflects energy loss, and influences, due to system self-regulation processes, the creation of stable structures that cause system entropy. Such structures, ideally, form the perception of transition to sustainable development as a kind of “virtuous circle”: ecologisation of the economy through innovations stimulates the creation of new “green” industries and jobs, which promotes social inclusion and welfare; this, in turn, forms solvent demand for ecological goods and services and demand for responsible state policy; and this again stimulates “green” innovations, and so on.

However, in practice, this process does not occur so smoothly and linearly and encounters a number of contradictions that all countries must overcome on the path to sustainable development, which consist in:

– conflict between short-term and long-term goals;

– relationship between the role of the state and market in promoting and regulating sustainable development;

– alignment of interests in relationships between national and global levels of sustainable development policy;

– balance of expenditures on human and social capital development.

It is already evident that traditional basic approaches (conservative and progressive) do not currently allow for quality management of adaptation processes and implementation of sustainable development in national socio-economic systems. The principles of the conservative approach – conservation (ecological reserves or prohibitions), limitations (licensing activities, quotas, etc.), regulation, and restraint (economic sanctions, fines) – only reinforce existing contradictions. The progressive approach – implementing preferential taxation, incentive lending, promotion and popularisation of activities in the information space; despite aiming to create an atmosphere of engagement and cooperation – in practice encounters either a lack of adaptation resources or resistance to change and transforms into coercion and limitations characteristic of rigid regulatory elements and hierarchical systems. This ultimately generates fragmentation by focusing attention only on certain economic programmes, not revealing the full potential and thus missing opportunities for growth through development and hidden resources [33], and reinforces the crisis of trust.

At the same time, system self-regulation patterns, considering existing rules and contradictions, conditioned by system optimality patterns (L. Bertalanffy), direct the development of transformation in internal processes of national socio-economic systems along the vector of least resistance both in functioning and in achieving certain optimal values for its internal structure (primarily in forming a balanced and harmonious character of internal processes). Change in properties and internal process structure occurs gradually, in synergistic interaction of components at all levels, based on assessment of the nature of external environment influence and availability of adaptation potential.

If the adaptation potential accumulated in the economic sphere of ecosystem functioning is insufficient for changes, system self-regulation mechanisms will be directed towards resisting transformational changes and equalising the system state by delaying the system's approach to the bifurcation point. Artificial acceleration of transformation processes will have a negative impact, transferring negative entropy to other subsystems (social, ecological), to other levels and spheres of functioning, creating and reinforcing imbalance, or delaying the bifurcation transition, leading to system destruction.

Furthermore, despite the positive impact of sustainable development on national socio-economic systems (harmony, balance, resource transit) at the global level, the concept's orientation primarily at the global level creates a certain destructive element, conditioned by the pattern of entropic equilibrium. With insufficient adaptation potential in the system, reduction of imbalance occurs through transferring part of the entropic influence to lower levels (primarily to national economic and social systems), manifested through systemic cataclysms that cause uncertainty and insecurity in socio-social systems and reduce economic fluctuations through impact on the social component.

With excessive focus on environmental problems, even in developed countries, preconditions for loss of economic sustainability are created, through gradual loss of competitiveness and, consequently, gradual loss of social sustainability.

The negative aspect of the sustainable development concept for developing countries lies in creating threats through transferring part of the entropy from the "sustainability core» (developed countries) to developing countries, reinforcing the system's negative entropy and generating internal imbalance of processes in national socio-economic systems:

1) Focusing on balancing their social systems, this approach on one hand contributes to economic sustainability, on the other—slows down economic development processes (example of African continent countries);

2) Focusing on balancing environmental sustainability (India, China) – slows technological and economic progress;

3) Focusing on economic sustainability and new socio-economic models (Arabian Peninsula countries) creates threats to social sustainability and cultural-political structures.

Thus, as we can see, sustainable development is not simply a technocratic concept but a complex and sometimes contradictory process of reconciling different dimensions and development interests, balancing between economic, social, and environmental goals. It requires changes not only in policy and economics but also in value systems, ways of thinking, and behaviour of people and organisations. Each country must pursue sustainable development in its own way, building on its strengths and overcoming its inherent contradictions. And although there is no universal recipe for success here, common denominators are innovation, openness, capacity for dialogue and consensus-seeking. And most importantly — rationality and optimal sufficiency.

Scientists see the solution to this challenge primarily in revising principles of rigid regulation towards flexibility, considering the interests of all process participants while ensuring a comprehensive nature and multi-level interaction to achieve internal balance. The essence of a flexible management system lies in common approaches to: policy development and coordination, through defining common goals and ways to achieve them, joint analysis and decision-making to ensure interpenetration, mutual responsibility, and mutual coordination of information flow integration; joint calculation, fair redistribution, and coordinated use of the resource-material base based on resource conservation principles for optimal reservation of resources for the needs of sustainable development process participants [33].

Despite all existing practical efforts, today the sustainable development concept, as a global model for human survival, is experiencing a certain crisis of trust. As the outcomes of the 2023 New York Summit on Sustainable Development Goals showed: “the path to achieving these ambitious goals remains uneven, with persistent gaps in poverty eradication, climate action, and other critical areas» [5; 42]. Not least, this phenomenon is a consequence of internal systemic contradictions, reinforcement through contradictions, negative influence of properties and patterns of the system itself, in which self-regulation mechanisms direct the trajectory along the optimal vector of transformational changes in changing conditions.

Based on systemic patterns, conditioned by genesis between components, the system restructures its internal processes to renew a sustainable state, while existing correction mechanisms are not always adequate to current challenges, aimed at compensating for equilibrium disturbances and capable of creating a timely response. It is already evident that such imbalance between systemic patterns and correction mechanisms cannot compensate for forms of negative pattern manifestation but rather reinforces fluctuation oscillations and brings the system closer to the bifurcation point, or, at certain levels, delays the bifurcation transition (Table 5).

Table 5. – Contradictions between system patterns and management

System properties	Form of negative manifestation	System reaction	Correction mechanisms	Current state
System hierarchy	Imbalance of internal structure and feedback connections	Reinforcement of fluctuations, generation of uncertainty and turbulence	System evolution mechanisms: - ideological coordination - political, economic, and social adaptation - societal alignment - fiduciary adjustment	- Crisis of trust in sustainable development as a global concept - Recognition of the need to refine Global Sustainable Development Goals at the UN level - Prioritisation of national interest over global
System emergence	Transfer of part of negative entropy to lower levels	Structural preconditions for systemic cataclysm	System adaptation mechanisms: - market self-regulation - political-ideological interpretation - living standards and social stability - cultural-ethnic traditions - focus on achieving sustainability in only one component	- Acceleration of fragmentation, global decentralisation of socio-economic systems and formation of new “centres of gravity» - Growing role of economic and social components, significance of material flow
System additivity	Excessive focus on one subsystem component creates preconditions for losing sustainability in others	Structural resistance to change, levelling of process dynamics to optimal trajectory	System viability mechanisms: - equifinality (effectiveness) - diversity (flexibility of response) - adaptability - optimality (choosing the path of least resistance)	- Intensification of alternative sustainability model development - Strengthening the importance of energy resources - Growing significance of harmonisation, principles of rationality and optimal sufficiency
System self-organisation	Restructuring of internal processes to achieve sustainability	Ordering of material and information flow trajectory	Hierarchical management mechanisms: - coercion and quotas - financial incentives - artificial balancing and achievement of emergence - delaying bifurcation transition	- Crisis of hierarchical management models - Digitalisation: renewed role of information flow (reaction speed as key to success) - Formation of flexible management models

**Source: author’s development.*

Fluctuation oscillations are, on one hand, a precondition for the system’s loss of internal equilibrium, and on the other hand, they trigger internal processes associated with forming a qualitatively new system. When fluctuation oscillations reach a critical value (bifurcation point), the system’s internal processes direct the development vector either along a positive scenario or towards destruction (negative scenario). The behaviour of the system’s internal structure during transformational change depends on the degree of balance: possibilities for unlocking internal potential, internal balance and process stability, and stability of information connections. System imbalance brings it closer to the bifurcation point and increases its sensitivity to internal (disruption of system patterns) and external (environmental influence) stimuli.

Таблиця 5. – Протиріччя між закономірностями системи та управлінням

Властивості системи	Форма негативного прояву	Системна реакція	Механізми корегування	Поточний стан
Ієрархічність системи	Розбалансованість внутрішньої структури та зворотніх зв'язків	Підсилення флуктуацій, породження невизначеності та турбулентність	Механізми еволюціонування системи: - ідеологічне взаємоузгодження, - політична, економічна та соціальна адаптація, - соцієтальна узгодженість, - фідуциарне корегування	- Криза довіри до сталого розвитку як до глобальної концепції. - Усвідомлення потреби уточнення Глобальних Цілей сталого розвитку на рівні ООН. - Приоритизація національного інтересу над глобальним
Емерджентність системи	Перенесення частини негативної ентропії на нижчі рівні.	Структурні передумови для системного катаклізму	Механізми адаптації системи: - ринкова саморегуляція, - політико-ідеологічна інтерпретація, - рівень життя та соціальна стабільність, - культурно-етнічні традиції, - фокус досягнення сталості тільки на однієї зі складових.	- Прискорення фрагментацій, глобальна децентралізація соціально-економічних систем та формування нових «центрів тяжіння». - Зростання ролі економічної та соціальної складової, значення матеріального потоку.
Адитивність системи	Надмірний фокус на однієї складовій підсистемі створює передумови до втрати сталості в інших	Структурний опір змінам, вирівнювання динаміки процесів на оптимальну траекторію	Механізми життєздатності системи: - еквіфінальність (результативність), - різноманітність (гнучкість реакції), - адаптивність, - оптимальність (вибір траєкторії найменшого опору)	- Інтенсифікація розвитку альтернативних моделей сталості. - Підсилення значення енергетичного ресурсу. - Зростання значення гармонізації, принципів раціональності та оптимальної достатності
Самовпорядкування системи	Перебудова структури внутрішніх процесів для досягнення стану сталості	Впорядкування траєкторії матеріального та інформаційного потоку	Механізми ієрархічного управління: - примусу та квотування, - фінансового стимулювання, - штучного збалансування та досягнення емерджентності, - затягування біфуркаційного переходу	- Криза ієрархічних моделей управління. - Цифровізація: оновлення ролі інформаційного потоку (швидкість реакції як запорука успіху). - Формування гнучких моделей управління.

**Джерело: розробка автора.*

The effect of imbalance influences all levels of internal structure, has a nonlinear and reciprocal propagation character, and leads to minor previous causes generating significant deviations in system stability, substantially changing the general course of processes, and leading to fundamental landscape changes. On one hand, this allows for shortening and strengthening feedback connections and, thanks to system self-regulation, enhancing the synergistic effect and reducing energy expenditure on management processes. On the other hand, even minor negative fluctuations, amplified through synergistic interaction, change the system's trajectory, lead to significant negative results, and require increased informational influence of management processes to correct energy flows.

One practical example of this phenomenon is the influence of the "Trump factor» and his return to power in the USA in 2025. This will undoubtedly have a significant impact on global sustainable development policy, considering the USA's weight in the world economy and geopolitics [41]. Let us examine the influence of this factor in the context of sociocultural barriers and international obligations (Table 6), which we discussed earlier.

Table 6. – Influence of US political vector change in the context of sociocultural barriers and international obligations

Region/group of countries	Main sociocultural barriers to sustainable development	Approaches to overcoming resistance to change	Examples of best practices
USA under Trump administration	– Strengthening of climate scepticism and anti-globalism – Priority of economic nationalism and traditional industries (coal, oil) – - Resistance to "green» regulations as a threat to jobs and way of life	– Mobilisation of progressive states and cities to protect «green» standards – Business and investor pressure towards decarbonisation – Appeal to values of energy independence, patriotism, technological leadership	– "We are still in" and "America's Pledge" movements supporting the Paris Agreement despite federal policy – Leadership of California, New York, and other states in decarbonisation and clean technology development – Private sector initiatives (GAFAM, etc.) to achieve carbon neutrality
Developed European countries	– Growth of right-wing populism and Euroscepticism – Fears of losing competitiveness due to unilateral climate commitments – Uneven "green» transition between EU countries and regions	– Positioning the European Green Deal as a new strategy for growth and economic modernisation – Enhanced dialogue and support for vulnerable countries/regions (Just Transition Fund) – Support for retraining programmes and social adaptation of workers in traditional industries	– European Climate Law and Fit for 55 packages for achieving climate neutrality by 2050 – Taxonomy of Sustainable Economic Activities and ESG disclosure standards – Initiatives for decarbonising basic industries (steel, cement, chemical) based on hydrogen and CC(U)S
China and other developing countries	– Aspiration for rapid industrialisation and urbanisation at the environment's expense – Dependence on fossil fuels and lack of alternative infrastructure – Limited access to "green» finance and technologies – Inequality and social exclusion as barriers to participation in the "green» transition	– Prioritisation of "green» recovery after COVID-19 – Development of renewable energy and other low-carbon industries as new growth drivers – Expanding access to basic services (energy, water, transport) based on "clean" technologies – Involvement of local communities and traditional knowledge in sustainable natural resource management projects	– China's voluntary climate commitments (peak emissions by 2030, neutrality by 2060) – China's initiative to create a "green Silk Road» and tie BRI financing to environmental criteria – Programmes for mass implementation of "clean» energy in rural areas of India, Bangladesh, African countries – Experience exchange platform among Southern countries regarding SDG localisation and climate change adaptation

**Source: author's development.*

Таблиця 6. – Вплив зміни політичного вектора США в контексті соціокультурних бар'єрів та міжнародних зобов'язань

Регіон / група країн	Головні соціокультурні бар'єри для сталого розвитку	Підходи до подолання опору змінам	Приклади кращих практик
США за адміністрації Д. Трампа	– Посилення кліматичного скептицизму і антиглобалізму – Пріоритет економічного націоналізму і традиційних галузей (вугілля, нафта) – Опір «зеленим» регулюванням як загрозі робочим місцям і способу життя	– Мобілізація прогресивних штатів і міст на захист «зелених» стандартів – Тиск бізнесу і інвесторів на користь декарбонізації – Апеляція до цінностей енергетичної незалежності, патріотизму, технологічного лідерства	– Рух "We are still in" і "America's Pledge" на підтримку Паризької угоди попри федеральну політику – Лідерство Каліфорнії, Нью-Йорку та інших штатів у декарбонізації та розвитку чистих технологій – Ініціативи приватного сектору (GAFAM та ін.) з досягнення вуглецевої нейтральності
Розвинені країни Європи	– Зростання правого популізму та євроскептицизму – Побоювання втрати конкурентоспроможності внаслідок односторонніх кліматичних зобов'язань – Нерівномірність "зеленого» переходу між країнами і регіонами ЄС	– Позиціонування European Green Deal як нової стратегії зростання і модернізації економіки – Посилений діалог і підтримка для вразливих країн/регіонів (Фонд справедливої трансформації) – Підтримка програм перекваліфікації та соціальної адаптації працівників традиційних галузей	– European Climate Law і пакет Fit for 55 для досягнення кліматичної нейтральності до 2050 – Taxonomy of Sustainable Economic Activities і стандарти розкриття ESG-інформації – Ініціативи з декарбонізації базових галузей (сталеливарна, цементна, хімічна) на основі водню та CC(U)S
Китай та інші країни, що розвиваються	– Прагнення до швидкої індустріалізації та урбанізації за рахунок довкілля – Залежність від викопного палива та брак альтернативної інфраструктури – Обмежений доступ до «зелених» фінансів і технологій – Нерівність і соціальна ексклюзія як бар'єри для участі в "зеленому» переході	– Пріоритезація «зеленого» відновлення після COVID-19 – Розвиток відновлюваної енергетики та інших низьковуглецевих галузей як нових драйверів зростання – Розширення доступу до базових послуг (енергія, вода, транспорт) на основі «чистих» технологій – Залучення місцевих громад і традиційних знань у проекти сталого управління природними ресурсами	– Добровільні кліматичні зобов'язання Китаю (пік викидів до 2030, нейтральність до 2060) – Ініціатива КНР зі створення «зеленого Шовкового шляху» і прив'язки фінансування BRI до екологічних критеріїв – Програми з масового впровадження «чистої» енергії у сільських районах Індії, Бангладеш, країн Африки – Платформа обміну досвідом між країнами Півдня щодо локалізації ЦСР та адаптації до зміни клімату

**Джерело: розробка автора.*

The actual policy change under Trump's second administration creates an additional challenge to global cooperation on sustainable development. While during Joe Biden's presidency America largely returned to active participation in the Paris Agreement and multilateralism, the new Republican administration is already prioritising domestic priorities and short-term interests of traditional industries. This is manifested in withdrawal from international agreements, slowing down and refusing negotiations on strengthening climate goals, curtailing federal support programmes for "green» technologies, etc. [32].

At the same time, as previous experience shows, the federal policy of the Trump administration is unlikely to completely halt the "green" transition within the USA and may lead to an increased gap between progressive and conservative states and social groups. Such resistance will primarily affect social sustainability, manifesting in individual initiatives of states and municipalities, voluntary commitments of the private sector, and investor pressure through ESG instruments and responsible financing. Considering the global nature of the sustainable development concept and the pattern of entropy expansion, this phenomenon will, on one hand, strengthen the position of countries seeking to maintain the momentum of "green" transformation in the ecological subsystem, and on the other hand, make countries dependent on entropy expansion – negative impact on economic sustainability (through termination of funding for relevant programmes) and social sustainability (through inability to ensure quality social welfare) [3].

Considering this factor, the European Union will face an additional challenge: whether additional incentives for consolidating the role of global climate leader and locomotive of multilateral "green" cooperation correspond to economic and social interests. Moreover, a key question will arise: does the acceleration of the European Green Deal, strengthening climate diplomacy, correspond to the national interests of EU member countries, and how will the formation of coalitions with other progressive players – China, Japan, South Korea, some other developing countries – reflect on the global socio-economic landscape of transformational changes [31]. Meanwhile, within the EU, friction between "old" and "new" Europe may intensify due to different dependencies on traditional energy and industry, requiring flexible mechanisms for balancing interests.

For China and other major developing countries, the US policy shift will be both a challenge and an opportunity. On one hand, the revival of Washington's climate scepticism may weaken international pressure on them and create space for slower decarbonisation. Less ambitious Western actions will also complicate these countries' access to "green" finance and technologies on preferential terms. On the other hand, this will allow countries like China and India to seize the initiative and offer their own vision of climate leadership and South cooperation. In particular, Beijing may use this moment to promote the concept of a "green" Silk Road and position itself as a responsible global player capable of offering developing countries an alternative model of low-carbon growth based on accessible technologies and infrastructure. India, in turn, may mobilise Southern countries around demands for a just transition and differentiated obligations considering their specific needs and circumstances. Both countries, however, are unlikely to abandon the basic principle of "common but differentiated responsibilities", which places the main burden of decarbonisation on developed countries.

Thus, although the return of the Trump administration slows the global "green" transition and reinforces the fragmentation of the global landscape, it is unlikely to stop it. Most likely, this will lead to certain geopolitical and ideological polarisation of transformation processes, formation of power centres (USA, EU, China) that will offer competing visions of the climate agenda and low-carbon development models. In these conditions, multilateral institutions and processes – such as the UN, G20, OECD – capable of maintaining platforms for dialogue and coordination of efforts will gain special significance [31].

No less important will be the growing role of non-state actors – business, investors, local authorities, civil society, and expert networks – which, given

established models of conscious consumption, will form demand and pressure for responsible climate policy from below. In this sense, an important lesson is that even the most powerful countries cannot ignore the urgency of sustainable development challenges in the long term. It should be noted that, considering the retrospective evolution of principles and approaches to sustainability of socio-economic systems – from rationality of management (A. Smith), through equilibrium and orderliness of socio-economic systems (F. Hayek), balance of order and harmonic equilibrium (H. Spencer, T. Malthus, T. Veblen, J. Schumpeter) – they can only postpone and slow down changes.

Today, the principles of optimality, resilience, and reasonable sufficiency in building the internal structure of socio-economic transformation processes in national ecosystems, shared by all key players, are becoming more priority than ever. These principles can become the unifying element that will adjust the evolution process of the sustainability concept itself and restore confidence in its ability to address global civilisational challenges. Moreover, it should be remembered that a moment of uncertainty and turbulence is best for practical rethinking of conceptual ideas and choosing a new course based on harmony and balance, facilitating the discovery of new solutions and alliances that will open opportunities for breakthrough in humanity's socio-economic transformation.

Conclusions. Based on the conducted research, the following scientific and practical conclusions can be drawn:

1) The study revealed that the adaptation process of the sustainable development concept in national contexts occurs under the influence of systemic patterns that determine unique implementation trajectories. Analysis of empirical data demonstrates that adaptation effectiveness depends on the system's ability to balance between hierarchical stability and adaptive flexibility, between global requirements and national priorities. An important contribution of this research is the identification of the pattern of "uneven integration", according to which countries with lower economic development initially focus on economic and social components of sustainability, gradually integrating the environmental dimension. At the same time, the study has certain limitations related to differences in data availability and quality across different countries, which may affect the accuracy of comparative analysis. Further research is needed to more precisely determine the causal relationships between economic development level, institutional capacity, and implementation effectiveness of various sustainability concept components.

2) A key factor for successful implementation of the sustainability concept is the presence of sufficient adaptive potential in the economic subsystem, which allows compensating for transformational loads on social and environmental components. Results of comparative analysis of policies from five country groups (2000-2023) demonstrate that with insufficient adaptive potential, system self-regulation mechanisms are directed towards counteracting changes, leading to imitative rather than substantive implementation. The identified pattern has important practical implications, showing the necessity of preliminary economic potential building before implementing ambitious environmental programmes. However, it should be acknowledged that the study does not cover the full spectrum of cultural and geopolitical factors that also influence adaptive potential formation. It is also worth noting that the proposed model of "phased adaptation" requires additional verification in the context of transition economies and post-conflict societies.

3) Analysis of countries demonstrating the highest progress indicators in achieving Sustainable Development Goals (Scandinavian countries, certain Asian economies) revealed that these countries' success is largely due to implementing flexible, adaptive management models. These models are characterised by: 1) decentralised decision-making mechanisms; 2) active stakeholder involvement at all stages of the policy cycle; 3) continuous evaluation and correction of policies based on feedback. The research shows that such approaches allow more effective alignment of management influences with natural system self-organisation processes, creating a positive synergistic effect. At the same time, it should be considered that the effectiveness of flexible management models depends on institutional capacity level and social capital, so their direct transfer to other contexts may be problematic. Additional research is needed to determine specific adaptation mechanisms for these models to conditions of countries with different political and administrative traditions, economic development levels, and social capital.

4) Research results reveal the non-linear nature of global fluctuations' impact (such as changes in US climate policy, economic crises, geopolitical conflicts) on national sustainable development systems. Analysis of statistical data for 2015-2023 demonstrates that these fluctuations can both strengthen and weaken internal transformation processes depending on the system's resilience level and structural characteristics. In particular, it was found that countries with high institutional capacity and diversified economies demonstrate higher resistance to negative external influences. An important scientific contribution is the identification of the "compensatory acceleration» phenomenon, where external negative fluctuations (e.g., US withdrawal from the Paris Agreement) stimulate enhanced activity of other system actors. The conducted analysis has certain methodological limitations, particularly the difficulty of isolating effects of individual global events from the general context. A promising direction for further research is developing quantitative models that would allow more accurate measurement and prediction of such non-linear interactions in the sustainable development context.

5) The sustainable development concept has until recently been inherently holistic and integrative, determined by the pattern of hierarchical system ordering, interaction of part and whole, which requires rethinking approaches to management, regulation, and coordination of actions by various entities (state, business, civil society, science, etc.). The key factor in ensuring stability and adaptability of socio-economic systems in conditions of "green» transition is: overcoming resistance from countries and process actors, harmonising the relationship between state and market roles in promoting the sustainability concept, balancing interests between national and global policy levels, developing human and social capital. From the perspective of systemic processes, such hierarchical alignment proves the indisputability of positive results — increasing fluctuations, which contributes (based on system viability patterns) to qualitative reinforcement of system patterns. Change in properties and internal process structure should occur harmoniously, in synergistic interaction of components at all levels, based on assessment of external environment influence character and adaptation potential availability.

6) The withdrawal of the new US administration from international agreements, slowing down and refusing negotiations on strengthening climate

goals, curtailing federal support programmes for “green” technologies, etc., will primarily affect US social sustainability, manifest in individual initiatives at lower system levels, and lead to strengthening the position of countries seeking to maintain the momentum of “green» transformation. At the same time, it is important to remember the threat of negative system entropy for these countries, part of which will affect economic sustainability (through termination of funding for relevant programmes) and social sustainability (through inability to ensure quality social welfare). For developing countries, the US policy shift will be both a challenge and an opportunity: weakening international pressure will create space for slower decarbonisation, seizing initiative and promoting their own vision of climate leadership and cooperation.

REFERENCES

1. Agile Governance / supported by Hertie School. Geneva: WEF, 2024. URL: http://surl.li/pgpzaa
2. Anteil der Erneuerbaren Energien steigt. Official web page. URL: https://surl.li/pjapcb
3. APnews. The US has withdrawn from a climate agreement that helps developing nations, South Africa says. 2025. URL: https://surl.lu/yxiysl
4. Baker, S. (2016). Sustainable Development. 2nd Ed. London: Routledge.
5. Bharat, H.D. (2023). The New York Summit SDG 2023: Rescue Plan for 2030 Agenda as a Wake-up Call for the Decision Makers. *Environmental Policy and Law, no. 53, 221–231.*
6. Breuer, L.J. (2021). Horizontal Accountability for SDG Implementation: A Comparative Cross-National Analysis of Emerging National Accountability Regimes. *Sustainability, no. 13, 1–23.*
7. Bantekas, I., Akestoridi, K. (2023). Sustainable Development Goals, between Politics and Soft Law: The Emergence of “political Normativity” in International Law. *Emory International Law Review, no. 37(4), 499–560.*
8. Yadav, D., Yadav, A. (2023). Clean Environment as a Fundamental Right. *Indian Journal of Law and Legal Research, no. 5(2), 1–18.*
9. Mthembu, D.E., Nhamo, G. (2022). Aligning SDG 13 with South Africa’s Development Agenda: Adaptation Policies and Institutional Frameworks. *Journal of Disaster Risk Studies, no. 14(1), 1–11.*
10. Department of Statistics South Africa. Sustainable Development Goals: Country report. (2023). URL: https://www.statssa.gov.za/MDG/SDG Country report.pdf
11. Economic Advisory Council to Prime Minister of India. (2020). India’s Blue Economy: A draft policy framework. URL: https://surl.li/enqnas
12. Erneuerbare Energien in Zahlen. Official web page. URL: https://surl.li/atjrfq
13. GGGI Technical Report No. 5. green growth index: Concept, Methods and Applications. October 2019. URL: https://surl.li/nuexql
14. Green economy progress measurement framework. URL: https://www.un-page.org/green-economy-progress-measurement-framework
15. Green growth and sustainable development. URL: http://www.oecd.org/greengrowth
16. ICAT (Initiative for Climate Action Transparency). (2020). Sustainable Development Methodology: Assessing the Environmental, Social and Economic Impacts of Policies and Actions / eds. D. Rich, R. Song, K. H. Olsen. Washington D.C. : World Resources Institute; Copenhagen : UNEP DTU Partnership. URL: https://surli.cc/xqzlsi
17. ICAT (Initiative for Climate Action Transparency). (2020). Sustainable Development Methodology: Assessing the Environmental, Social and Economic Impacts of Policies and Actions / eds. D. Rich, R. Song, K. H. Olsen. Washington D.C. : World Resources Institute; Copenhagen : UNEP DTU Partnership. URL: https://surl.li/mbuwye
18. IEA. Renewables 2020 Data Explorer – Analysis. (2021).
19. Jann, W., Veit, S. (2021). Politics and Administration in Germany. Public Administration in Germany / eds. S. Kuhlmann, I. Proeller, D. Schimanke, J. Ziekow. Cham : Palgrave Macmillan, 145–161.
20. Khan. Can India Spearhead the Global South’s Blue Economy? (2023). URL: https://surl.li/wldnww

21. Konrad Adeanuer Stiftung India office, Energy and Resources Institute, National Maritime Foundation, and the Federation of Indian Chambers of Commerce and Industry. (2022). Blue Economy: India's pathway to sustainable, secure, and resilient economy. URL: https://surl.li/jrawgw

22. Kushal, I., Trunina, I., Zagirniak, D. (2019). An imitation model of the financial-economic mechanism of taking strategic decisions at the enterprise. SHS Web of Conferences. *Beijing. PR China, vol. 61, no. 01027.* DOI: https://doi.org/10.1051/shsconf/20196101027

23. Luhmann N. Essays on self-refererence. (1990). N.Y.: Columbia Univ. Press.

24. Bexell, M., Jönsson, K. (2021). The politics of the Sustainable Development Goals: Legitimacy, responsibility, and accountability. Routledge.

25. Butt, M. (2021). The Role of the International Law in Shaping the Governance for Sustainable Development Goals. *Journal of Law and Political Sciences, no. 28 (3), 87–164.*

26. Neumann, O., Kirklies, P.C., Schott, C. (2024). Adopting agile in government: a comparative case study. *Public Management Review, 1–23.* DOI: https://doi.org/10.1080/14719037.2024.2354776

27. Next steps for a sustainable European future European action for sustainability. (2016). COM/2016/0739 final report. Brussels: EC.

28. Ruppel, O. (2022). South Africa: Climate Change, Responsibility and Liability–The Legal System, Public and Private Law Considerations. *Climate change, responsibility and liability, vol. 1. Nomos, 215–216.*

29. Oberoi Parul, Bhandari Jitender. (2024). Evaluating the Role of Economic Factors in Sustainable Consumption Behaviour. P. 23–32.

30. Pauletto, C. (2024). Public management, agility and innovation: The Swiss experience with the COVID-19 loan scheme. *International Review of Administrative Sciences, no. 90 (1), 116–131*. DOI: https://doi.org/10.1177/00208523221143280

31. Tausendfreund, R., Moraal, M., Campbel, L. (2024). US elections and European cohesion: Scenarios for green transitions and Transatlantic climate action. URL: https://surl.li/upknot

32. Tausendfreund, R., Moraal, M., Campbel, L. (2025). Trump 2.0, Green Transition, and Transatlantic Climate Action. URL: https://surli.cc/kliydj

33. Russel, D., Kirsop-Taylor, N. (2022). Handbook on the Governance of Sustainable Development. *Edward Elgar Publishing, P. 139–141.* DOI: https://doi.org/10.4337/9781789904321

34. Shiwani et al. (2024). Transforming Urban Energy: Dynamics, Policies and Innovations in Suburban Energy Efficiency and Building Sustainability in India. P. 31–42.

35. Sustainable development in the European Union. (2020). Overview of progress towards the SDGs in an EU context. Eurostat.

36. The European Green Deal. COM (2019) 640 final. Brussels, 11.12.2019.

37. The Five Principles of Green Economy, Green Economy Coalition. URL: https://surl.li/siyadq

38. The Green Economy Indicator Guidance Manual. URL: https://surl.li/bqzkwv

39. The Integrated green economy modelling framework. URL: https://surl.li/ppjqet

40. The Partnership for Action on Green Economy (PAGE). Official web page. URL: https://www.un-page.org/

41. Trump will slow, but not stop, the energy transition. URL: https://surl.li/idpujd

42. UN. General Assembly Resolution 78/80-E/2023/64, "Progress Towards the Sustainable Development Goals: Towards a Rescue Plan for People and Planet, Report of the Secretary-General (special edition)». New York, 27 April 2023, para. 50. URL: https://surl.li/iqnoas

43. UN. (2016). Transforming our world: The 2030 agenda for sustainable development.

44. Volden, G.H., Andersen, B. (2018). The hierarchy of public project governance frameworks: An empirical study of principles and practices in Norwegian ministries and agencies. *International Journal of Managing Projects in Business, no. 11(1), 174–197.*

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ІДЕОЛОГІЧНА АДАПТАЦІЯ КОНЦЕПЦІЇ СТАЛОСТІ, ЧИ МОЖЛИВЕ РОЗКРИТТЯ ПОТЕНЦІАЛУ ЧЕРЕЗ СИСТЕМНІ ЗАКОНОМІРНОСТІ?

Анотація. Стаття акцентує увагу на можливості теоретико-методологічної адаптації концепції сталого розвитку за допомогою використання нового, більш гнучкого та адаптивного підходу до побудови управлінських процесів, гармонізації співвідношення між роллю держави та ринку у просуванні концепції сталості, дотриманні балансу інтересів у міжрівневій взаємодії та оптимально розкрити недовикористаний потенціалу людського та соціального капіталу. Метою статті є наукове обґрунтування можливості раціонального збалансування концепції сталості із національними інтересами та використання її як інтеграційного підходу до побудови нової економіко-соціальної моделі на основі гармонізації саморегулювання та управлінського впливу, що здатне пришвидшити метаболічні та регенераційні процеси.

Автор акцентує увагу, що і на сьогодні фундаментальні принципи сталого розвитку - баланс між економічним зростанням, соціальною справедливістю та екологічною стійкістю - залишаються вкрай важливими і релевантними викликам сьогодення. Автор стверджує, що попри розрізненість та фрагментованість у практичній імплементації, що підривають довіру до концепції сталості, як оптимального практичного підходу, ще залишається можливість для розкриття недовикористаного потенціалу, спираючись на баланс системних закономірностей та механізми саморегулювання. Автор зауважує, що трансформація управлінських підходів у процесах гнучкої адаптації концепції із національними інтересами, узгодження практичних підходів управління із системними закономірностями дозволить країнам та регіонам не лише ефективніше долати поточні виклики, але й закладати фундамент стратегічної стійкості та конкурентоспроможності. Стаття розкриває теоретико-аналітичні та системно-методологічні основи імплементації гнучкого та адаптивного підходу до управління сталим розвитком, як оптимальної моделі, яка дозволяє: узгодити між рівневі цілі та цінності, поєднати вимоги сьогодення (прагматичність та контекстна орієнтованість) із стратегічними принципами сталості – оптимальності та раціональності, адаптивності та резилієнтності.

Ключові слова: сталий розвиток, публічне управління, циркулярна економіка, зелена економіка, цифрова економіка, smart-спеціалізація, гнучке управління, антикризове управління, економічна політика.

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