

УДК 339.92:502.131.1:504.06

DOI: <https://doi.org/10.30838/EP.212.184-192>**Reznikova Nataliia**

Dr. of Economic Sc.

Educational and Scientific Institute of International Relations

Taras Shevchenko National University of Kyiv

**Резнікова Н.В.**

доктор економічних наук

Навчально-науковий інститут міжнародних відносин

Київський національний університет імені Тараса Шевченка

<https://orcid.org/0000-0003-2570-869X>**Panchenko Volodymyr**

Dr. of Economic Sc.

Mariupol State University

**Панченко В.Г.**

доктор економічних наук

Маріупольський державний університет

<https://orcid.org/0000-0002-5578-6210>**Husarova Kateryna**

Educational and Scientific Institute of International Relations

Taras Shevchenko National University of Kyiv

**Гусарова К.В.**

Навчально-науковий інститут міжнародних відносин

Київський національний університет імені Тараса Шевченка

<https://orcid.org/0000-0001-8101-0363>**Hrytsenko Yaroslav**

Educational and Scientific Institute of International Relations

Taras Shevchenko National University of Kyiv

**Гриценко Я.В.**

Навчально-науковий інститут міжнародних відносин

Київський національний університет імені Тараса Шевченка

<https://orcid.org/0009-0005-5705-8339>

## EROSION OF CLIMATE MULTILATERALISM: FROM A UNIVERSAL REGIME TO A LOCALIZED REGULATORY LOGIC

*The purpose of the study is to conceptualize the erosion of the universal climate regulatory regime as a process of structural replacement of the universal regulatory logic by a localized one and to theoretically substantiate the concept of taxonomic multiplicity as a structural phenomenon of contemporary climate policy. The article argues that the transformation of the global climate regime during the decade following the adoption of the Paris Agreement cannot be adequately explained through categories of institutional weakness or insufficient political will. Instead, it should be interpreted as a systemic replacement of the universal regulatory logic by a localized one, within which climate policy functions according to the rationality of economic competition and redistribution of gains rather than collective coordination. The research methodology relies on structural-logical analysis, comparative method, conceptual differentiation, typological analysis, and theoretical generalization.*

*The study demonstrates that the Paris Agreement formally retains its status as the central instrument of the global climate regime, while the practical implementation of climate policy increasingly shifts to the space of national and regional policies, including the Carbon Border Adjustment Mechanism of the European Union, the European Union Emissions Trading System, the Inflation Reduction Act of the United States, and the dual carbon control mechanism of the People's Republic of China. These parallel regulatory spaces do not aggregate into a universal system but instead reproduce competing architectures of sustainable activity classification, green finance eligibility, and cross-border carbon accounting. It is established that the coexistence of more than two dozen sustainability taxonomies is not a temporary dysfunction but a structural characteristic of the new regulatory order. The scientific novelty lies in developing a theoretical framework that interprets the proliferation of sustainability taxonomies and the deliberate ambiguity of key*

ISSN друкованої версії: 2224-6282

ISSN електронної версії: 2224-6290

© Резнікова Н.В., Панченко В.Г., Гусарова К.В., Гриценко Я.В., 2026

terminological categories as structural features of the new regulatory environment rather than as technical problems of harmonization. On this basis, the article advances the concept of taxonomic multiplicity and formulates the central paradox of the contemporary climate regulatory order as a persistent gap between the declarative level of multilateral commitments and the operational level of their implementation.

**Keywords:** regulation, regulatory architecture, regulatory policy, regulatory competition, regulatory coordination, multilateralism, multipolarity, cooperation, coordination, climate policy, climate finance, green economy, Paris Agreement, CBAM, EU ETS, taxonomy of sustainable activities, regulatory arbitrage, extraterritoriality, fragmentation, interdependence, EU, USA, PRC.

**JEL classification:** F18, F53, Q54, Q56, Q58.

## ЕРОЗІЯ КЛІМАТИЧНОГО МУЛЬТИЛАТЕРАЛІЗМУ: ВІД УНІВЕРСАЛЬНОГО РЕЖИМУ ДО ЛОКАЛІЗОВАНОЇ РЕГУЛЯТОРНОЇ ЛОГІКИ

Мета дослідження полягає у концептуалізації ерозії універсального кліматичного режиму як процесу структурного заміщення універсальної регуляторної логіки локалізованою і в теоретичному обґрунтуванні таксономічної множинності як структурного явища сучасної кліматичної політики. У статті обґрунтовано, що трансформація глобального кліматичного режиму, яка відбулася протягом десятиліття після ухвалення Паризької угоди, не може бути адекватно пояснена через категорії інституційної слабкості або недостатньої політичної волі. Ця трансформація має системний характер і полягає у структурному заміщенні універсальної регуляторної логіки локалізованою, у межах якої кліматична політика функціонує за раціональністю економічної конкуренції і перерозподілу вигод, а не колективної координації.

У результаті дослідження показано, що Паризька угода формально зберігає статус центрального інструменту глобального кліматичного режиму, тоді як практична реалізація кліматичної політики дедалі більше переміщується у простір національних і регіональних політик, включно з Механізмом вуглецевого коригування на кордоні Європейського Союзу, Європейською системою торгівлі квотами на викиди, Законом про зниження інфляції Сполучених Штатів Америки і механізмом подвійного контролю вуглецю Китайської Народної Республіки. Ці паралельні регуляторні простори не агрегуються у єдину систему, а відтворюють конкуруючі архітектури класифікації сталої діяльності, критеріїв доступу до зеленого фінансування і транскордонного обліку вуглецю. Встановлено, що співіснування більше двох десятиків таксономії сталої діяльності не є тимчасовою дисфункцією, а структурною характеристикою нового регуляторного порядку.

Наукова новизна одержаних результатів полягає у формуванні теоретичної рамки, яка інтерпретує множинність таксономій сталої діяльності і навмисну невизначеність ключових термінологічних категорій як структурні характеристики нового регуляторного середовища, а не як технічні проблеми гармонізації. Запропоновано концепт таксономічної множинності як структурного явища сучасної кліматичної політики та сформульовано центральний парадокс сучасного кліматичного регуляторного порядку як стійкий розрив між декларативним рівнем багатосторонніх зобов'язань і операційним рівнем їх реалізації через локалізовані і взаємно несумісні інструменти. Удосконалено підхід до розмежування універсальної і локалізованої регуляторних логік у кліматичній сфері. Дістало подальшого розвитку положення про екстериторіальний характер сучасних кліматичних інструментів як механізм відтворення регуляторної конкуренції.

**Ключові слова:** регулювання, регуляторна архітектура, регуляторна політика, регуляторна конкуренція, регуляторна координація, багатосторонність, багатополарність, кооперація, координація, кліматична політика, кліматичне фінансування, зелена економіка, Паризька угода, CBAM, Європейська система торгівлі квотами на викиди, таксономія сталої діяльності, регуляторний арбітраж, екстериторіальність, фрагментація, взаємозалежність, ЄС, США, КНР.

**Problem statement.** The adoption of the Paris Agreement in 2015 marked the culmination of a half-century-long process of institutionalizing climate issues as a sphere of global collective governance. At the time of its signing, it was assumed that the universal nature of obligations, the mechanism of nationally determined contributions, a regular cycle of global reviews, and a gradual increase in ambition would create an infrastructure sufficient for a concerted move towards climate neutrality within a defined time horizon. The logic of the Paris Agreement was based on the assumption that the climate problem, due to its

global physical nature, objectively requires a collective response and, therefore, multilateral coordination is the most rational means of addressing it. Over the decade since the adoption of the agreement, this institutional framework has undergone significant changes, the nature of which warrants a separate theoretical understanding. On the one hand, the Paris Agreement has retained its formal status as the central instrument of the global climate regime. On the other hand, the practical content of climate regulation is increasingly moving into the plane of national and regional policies, which operate according to a different logic - the

logic of economic competition, redistribution of competitive advantages, and strategic influence on external actors. The introduction of the Carbon Adjustment Mechanism at the border of the European Union, the adoption of the Inflation Reduction Act in the United States of America, the formation of a dual carbon control system in the People's Republic of China record the emergence of parallel regulatory spaces that are not integrated into a single system and interact with each other more in the logic of competition than coordination. The study's relevance stems from the need for a theoretical explanation of the gap between the formal stability of the multilateral regime and the substantive transformation of climate regulation practice. Of particular importance is the analysis of the taxonomic dimension of climate regulation, within which, in parallel with the evolution of carbon pricing instruments and industry standards for decarbonization, multiple systems for classifying sustainable activities have been formed, which, as of 2025, encompass more than two dozen separate taxonomies and do not show signs of convergence. The persistence of taxonomic plurality, despite the declared interest of all parties in harmonization, indicates that it serves a systemic function within the new regulatory architecture.

**Analysis of recent research and publications.** Fundamental methodological approaches to measuring the severity of environmental regulation are laid out in the works of C. Brunel and A. Levinson [1]. The conceptual foundations for identifying a green economy are laid out in the studies of K. Burkart [2] and V. Chala and Yu. Orlovska [3] analyzes the links between environmental impact and the creation of added value in global supply chains, and R. Clift and L. Wright [4] do the same. The analytical background is also provided by the study of neoprotectionism as a structural phenomenon of a liberalized economy [5; 6] and the formation of new centers of economic growth in the conditions of the new norm of the world economy, co-authored by O. Ivashchenko [7; 8].

A fundamentally important research direction was formed in a number of works by A. Tsybulyak [11; 12; 13; 14], which consistently reveal the genesis of the driving forces of greening international trade relations, its scientific foundations, the search for institutional mechanisms of a systemic compromise between the ecological imperative of sustainability and the right to development, as well as the evolution of theories of ecological modernization. Of particular importance for climate issues are studies co-authored by M. Grod - on the institutionalization of climate action in leading regulatory centers [9], decoupling as a new form of international economic policy [10], as well as institutional support for the circular economy in the European Union, the role of the European Central Bank in the circular transition and the prospects for greening the financial system [15; 16; 17]. The studies of O. Ptashchenko, co-authored with D. Arkhipova and V. Karp [18; 21], contributed to the development of the issues of global challenges and modernization policy. The analytical background is formed by the studies co-authored by D. Rusak and O. Ivashchenko on risk management in global value chains [19] and educational and methodological works on international strategies of economic development

[20]. The Ukrainian perspective is revealed in the works of the author team led by O. Yatsenko and G. Duginets [22; 23] on international experience in post-war reconstruction and the European integration imperatives for Ukraine's restoration on the basis of sustainability.

Despite the significant amount of research in the areas of greening international trade, institutionalizing climate policy, financing the green transition, and the circular economy, the current academic literature still lacks a comprehensive explanation of the structural nature of the transformations that have occurred in the global climate regulatory regime in the decade since the adoption of the Paris Agreement. Existing research focuses mainly on individual dimensions of these transformations and does not address the logic of the structural replacement of universal regulatory logic with localized regulatory logics as a single process. The issue of taxonomic plurality as a structural phenomenon remains insufficiently explored: despite statements on the plurality of classification systems in some works, the literature lacks a conceptual explanation for why the coexistence of more than two dozen taxonomies of sustainable activity remains stable despite the declared interest of all parties in harmonization. This creates a need for a coherent theoretical framework that interprets taxonomic multiplicity and the intentional vagueness of key terminological categories not as technical coordination problems but as structural characteristics of the new regulatory order.

**The purpose of the article** is to conceptualize the erosion of the universal climate regulatory regime as a process of structural replacement of the universal regulatory logic by a localized one, and to theoretically substantiate the concept of taxonomic multiplicity as a structural phenomenon of contemporary climate policy, based on the analysis of regulatory instruments of the European Union, the United States, and the People's Republic of China.

**Research methods.** To achieve the goal, the study applied a set of general scientific and specialized methods to provide a systematic analysis of the behavioral foundations of localized regulatory logic in the climate sphere. Game-theoretical analysis was used to interpret greenwashing and taxonomic arbitrage in the categories of five classical models of non-cooperative interaction - the "free-rider problem", the "beggar-thy-neighbor strategy", the "tragedy of the commons", the "prisoner's dilemma", and the "problem of asymmetric information". Analogies were used to substantiate the functional isomorphism between corporate greenwashing and interjurisdictional taxonomic arbitrage as two large-scale manifestations of a single strategy. Structural-logical analysis was used to reveal the transition from participants' behavior within the rules to changing the rules themselves as a key mechanism of a higher-order strategy. The comparative method was used to examine the characteristics of greenwashing and taxonomic arbitrage in a functional isomorphism table. The method of theoretical generalization yielded conceptual propositions about the architectural role of taxonomic fragmentation in the policy of development containment. The tabular method was used to systematize game-theoretical models and their climatic and taxonomic adaptations.

**Presentation of the main research results.** Theoretical understanding of the transformation of the global climate regime requires a preliminary distinction between two fundamentally different regulatory logics that determine the structure of interaction among participants. Universal regulatory logic assumes that the problem subject to regulation is global in nature, requires a collective response, and is amenable to solution through agreed rules that are equally binding on all parties. In this logic, individual national policies are viewed as derivatives of collective commitments, and discrepancies between them are interpreted as deviations that can be corrected through multilateral coordination instruments. The Paris Agreement was designed precisely as an institutional embodiment of this logic: despite the flexibility of nationally determined contributions, the system itself provides for a gradual convergence of ambitions through regular reviews and mechanisms of mutual control. Localized regulatory logic operates according to a fundamentally different rationality. Within this framework, climate policy is interpreted not as the implementation of collective obligations but as a tool for advancing national or regional interests, including

energy security, technological leadership, industrial competitiveness, and strategic influence over external counterparts. The collective nature of the problem is not denied at the declarative level, but the real behavior of actors is subordinated to the logic of a unilateral or regional solution. A comparison of the constitutive characteristics of the two regulatory logics, using key parameters, is presented in Table 1. The coexistence of the two logics in the current climate regime can be described as “multipolarity without multilateralism,” which captures the discrepancy between the growth in the number of economically and politically significant centers of power and the weakening of institutional mechanisms for coordinating their actions. A fundamental feature of localized regulatory logic is its ability to reproduce itself through extraterritorial effects. The European Union’s border carbon adjustment mechanism is formally an internal regulatory instrument, but its effects extend to all exporters supplying products to the European market. Similarly, the localization requirements of the United States’ Inflation Reduction Act formally apply only to recipients of American public funding, but in fact restructure producers’ investment behavior globally.

Table 1

**Comparative characteristics of universal and localized regulatory logics in the climate sphere**

<b>Comparison parameter</b>	<b>Universal regulatory logic</b>	<b>Localized regulatory logic</b>
<i>Goal-setting structure</i>	A shared goal articulated at the global level	Objectives are derived from national or regional development strategies
<i>Compliance mechanism</i>	Mutual reporting, reviews, reputational pressure, and gradual convergence	Unilateral regulatory instruments with extraterritorial effects
<i>Compliance mechanism</i>	Emissions as an aggregate indicator	Value chains, standards, localization requirements, and criteria for access to finance
<i>Interpretation of interdependence</i>	Collective action resource	Source of strategic vulnerability
<i>Nature of the interaction of participants</i>	Cooperative, negotiated	Competitive, with elements of strategic influence
<i>Role of multilateral institutions</i>	System-forming	One of the arenas, used selectively
<i>Time horizon</i>	Long-term, synchronized	Medium-term, unsynchronized
<i>Attitude towards sovereignty</i>	Voluntary self-restraint for the sake of common goals	Protecting autonomy while simultaneously spreading influence to others

Source: compiled by the authors

The extraterritoriality of localized instruments makes them a functional substitute for multilateral coordination, as they exert structural influence on the behavior of external actors without a corresponding negotiation process. Within a universal logic, interdependence is interpreted as a resource for collective action, while within a localized logic, it is perceived as a source of vulnerability and an object of strategic management. This reflects a deeper conceptual shift in which climate policy begins to function in the same categorical matrix as trade policy, technological control, and investment screening.

Empirical verification of the theoretical distinction requires an analysis of the key instruments of modern climate regulation of the three leading regulatory centers, each of which demonstrates a specific variant of localized logic and, at the same time, interacts with others in the mode of regulatory competition. The European Union is the most consistent embodiment of localized regulatory logic in its normative-extraterritorial variant. The central instrument is the Carbon Border Adjustment Mechanism, which imposes

an additional tax on imported products based on the volume of carbon emissions associated with their production. The official logic of the mechanism is to prevent "carbon leakage", but its actual consequences are much broader: it creates a new type of trade barrier and transforms climate policy into an instrument of trade regulation. A feature of this instrument is its ability to change the behavior of external actors without a formal negotiation procedure: exporters who wish to maintain access to the European market are forced to adjust their production and reporting practices to European standards. In parallel, the European Emissions Trading System operates, setting its own carbon-pricing rules and exerting significant extraterritorial effect through the integration of the European Union into global markets. The regulatory infrastructure is complemented by the Net Zero Industry Act, the Critical Raw Materials Act, and the Corporate Sustainability Reporting Regulation - together they form a dense regulatory space that extends to the entire production and financial cycle from raw material extraction to financing, production and

reporting.

The US is implementing a localized regulatory logic in a fiscal-industrial version. The central instrument is the Inflation Reduction Act, passed in 2022. Despite its name, which appeals to macroeconomic stabilization, the content of this act focuses mainly on climate and energy policy. The total amount of subsidies and tax credits for the green transition it provides is estimated at hundreds of billions of dollars, making it the largest industrial program in US history in the climate field. The fundamental difference between the American and European approaches is that, instead of regulatory pressure through standards, positive incentives through financial instruments are used. However, this difference does not eliminate the logic's localized nature; on the contrary, it strengthens it through requirements for local production, tying tax breaks to the American origin of components, and direct restrictions on the use of Chinese materials in subsidized projects. A characteristic feature of the Inflation Reduction Act is its ability to redistribute global flows of green investment: immediately after its adoption, a significant share of projects in battery technologies and electric vehicle component production was redirected from the EU to the US. This created a new configuration of regulatory competition, forcing the EU to respond through its own industrial initiatives.

The People's Republic of China implements a localized

regulatory logic within a system-centered framework. The main framework document is the policy of "dual carbon control", aimed at simultaneously limiting the absolute volume of emissions and their intensity per unit of gross domestic product. This policy is implemented through:

(1) a national emissions trading system, which in terms of industry coverage exceeds the European one;

(2) subsidy programs for producers in key green sectors;

(3) export restrictions on critical materials, including rare earth metals, gallium, and germanium;

(4) strategic development plans that integrate climate goals into the overall logic of economic development.

An important feature of the Chinese approach is the close connection between climate policy and industrial development: the development of green sectors is interpreted not only as a means to reduce emissions, but also as the basis for future technological leadership. The international dimension of the Chinese logic is manifested in the structuring of export flows of green technologies, the creation of a parallel infrastructure of standards and taxonomies as a functional alternative to Western models, and the formation of regulatory responses to Western restrictions. A summary comparison of the three variants of localized regulatory logic is given in Table 2.

Table 2

**Variants of localized regulatory logic in three regulatory centers**

<b>Characteristics</b>	<b>EU (normative-extraterritorial option)</b>	<b>USA (fiscal-industrial option)</b>	<b>PRC (system-centralized option)</b>
<i>Central instrument</i>	Carbon Border Adjustment Mechanism; Taxonomy of Sustainable Activities	Inflation Reduction Act	Dual Carbon Control
<i>Main mechanism of influence</i>	Regulatory pressure through standards and mandatory requirements	Positive incentives through subsidies and tax credits	Centralized strategic plans and industrial policy instruments
<i>Nature of influence on external actors</i>	Extraterritoriality through market access	Localization requirements and restrictions on the origin of components	Export restrictions on critical materials, large-scale export of finished solutions
<i>Relationship with trade policy</i>	Integration into the trade regulatory architecture	Direct combination with protectionist instruments	Seen as part of an overall economic leadership strategy
<i>Key Focus</i>	Formation of a sustainable industrial base within the Union	Reorientation of investments to the American territory	Achieving technological leadership in green sectors
<i>Attitudes towards the multilateral regime</i>	Formal loyalty with unilateral expansion of influence	Selective participation depending on internal priorities	Declarative support for the development of parallel infrastructure

Source: compiled by the authors

A comparison of the three described options allows us to record their common structural features: the formation of a model for each center without prior multilateral coordination; the actual going beyond the operational scope of the Paris Agreement with formal loyalty to its provisions; interaction mainly in the logic of competition, rather than coordination, which turns global climate regulation into an arena of competing regulatory projects. Taken together, these characteristics allow us to speak of a localized regulatory logic not as a deviation from a universal model, but as an independent structural regime. Of particular importance for understanding the new regulatory architecture is the taxonomic dimension of climate policy. The first full-

pledged taxonomy of sustainable activities was adopted by the European Union in 2020 and was initially considered as a technical means of directing financial flows into sustainable investments. However, over the next few years, taxonomic activity has turned into a separate arena of regulatory competition. In parallel with the European taxonomy, taxonomies were developed in Southeast Asia, Latin America, and Africa, including Chinese, British, Canadian, and Australian taxonomies, as well as a number of regional taxonomies. As of 2025, more than two dozen taxonomies of sustainable activities were operating in the world, which differed not only in technical parameters but also in fundamental approaches to determining the boundaries of

sustainability, criteria for adhering to the principle of "doing no significant harm," verification procedures, and channels of access to financing.

The idea of harmonization through the International Platform for Sustainable Finance, created in 2019, has not been implemented in practice: over the few years of its existence, this platform has not achieved operational convergence of taxonomies, and the dynamics of the development of national classification systems have demonstrated the opposite trend - deepening their specificity, expanding the list of activities covered, and differentiating criteria. The persistence of taxonomic plurality, despite the declared interest of all parties in harmonization, indicates that it performs a certain systemic function in the new regulatory architecture and cannot be reduced to technical coordination problems. On this basis, the concept of taxonomic plurality is proposed as a structural phenomenon of modern climate policy. The structural nature of this phenomenon lies in the fact that it is not a by-product of insufficient coordination but arises as a natural result of regulatory competition between centers of power. Each jurisdiction, developing its own taxonomy, captures in it a specific configuration of priorities, economic interests and technological stakes: the European taxonomy is built around ambitious decarbonization goals and the strict principle of "do no significant harm"; the Chinese taxonomy takes into account the specifics of transitional industries and includes categories that are not in the European classification; the American approach deliberately abandons a single taxonomy at the federal level, which provides flexibility in the implementation of the Inflation Reduction Act. A fundamentally important characteristic of taxonomic plurality is the intentional vagueness of key terminological categories.

The most striking example is the treatment of the concept of "decoupling" in European Union regulatory documents: the term is used in numerous directives in the field of circular economy, but none of them contains an agreed definition - there is no clarity as to whether we are talking about absolute or relative decoupling, local within the European Union or global, permanent or temporary. Such terminological divergence creates a space for interpretative flexibility, within which different actors can justify incompatible policy decisions by referring to the same category. A similar logic can be traced in the application of the concepts of "sustainable activity", "do no significant harm", "transitional economic activity", and "green financing". In each of these cases, the formal existence of a category in regulatory circulation is not accompanied by its operational clarification, which creates the prerequisites for regulatory arbitrage: business entities can choose a taxonomy whose criteria best match the nature of their activities and receive the status of "sustainable" with objectively different economic and environmental practices.

Empirical confirmation of the structural nature of taxonomic plurality is provided by the analysis of the evolution of the regulatory environment of the European Union in the field of circular economy, carried out in previous studies [15; 16; 17]. This analysis shows that the development of the European regulatory framework in this area is characterized by the continuous implementation of new and

revisions of existing strategies, the absence of a single commonly used definition of the circular economy despite numerous documents that use this category, structural decoordination of stakeholder interaction at different levels, as well as the inhibition of the process of harmonization of taxonomies. If even within the European Union - the most consistent center in implementing regulatory unification - the process of taxonomic differentiation outpaces the process of harmonization, then at the global level, where there are no supranational institutions capable of imposing a single model, taxonomic plurality becomes an even more persistent characteristic.

The analysis allows us to formulate the central paradox of the modern climate regulatory order: a persistent gap between the declaratory level of multilateral commitments and the operational level of their implementation through localized, mutually incompatible instruments. This gap is not a sign of insufficient political will or technical shortcomings in coordination; it is a structural characteristic of the order within which universal and localized logics interact, redistributing the functional weight in favor of the latter. The persistence of the gap generates several specific collisions that determine the behavior of participants in the regulatory space: between the principle of non-discrimination in the norms of the World Trade Organization and the extraterritorial nature of modern climate instruments; between the universal nature of the Paris Agreement and the selective nature of real regulatory practices implemented through coalitions, clubs, and unilateral initiatives; between the physical nature of the climate problem, whose greenhouse gases do not discriminate between jurisdictions, and the architecture of the response to it, which is increasingly segmented and localized. The latter collision is the most profound, as it reveals the structural inefficiency of localized logic in solving a global problem while simultaneously making it impossible for any individual actor to change this situation on its own.

**Conclusion.** The transformation of the global climate regime in the decade since the Paris Agreement has not been reduced to institutional weakness or insufficient political will. It is systemic in nature and consists in the structural replacement of a universal regulatory logic with a localized one, within which climate policy functions according to the rationality of economic competition and the redistribution of benefits. The formal preservation of the Paris Agreement as a central instrument does not contradict its erosion in operational terms - the declaratory shell of universalism masks a reorientation of participants' behavior toward localized strategies. An empirical analysis of the climate regulation instruments of the three leading centers of power revealed three interrelated variants of localized logic: normative-extraterritorial (European Union), fiscal-industrial (United States of America), and systemic-centralized (People's Republic of China), the common feature of which is the formation in isolation from multilateral coordination and interaction in the regime of regulatory competition.

The proposed concept of taxonomic plurality as a structural phenomenon allows us to interpret the coexistence of more than two dozen taxonomies of sustainable activity not

as a temporary dysfunction, but as a natural result of regulatory competition between centers of power. Plurality performs a systemic function: preserving regulatory autonomy, creating space for strategic differences, ensuring competitive advantage, and serving as an instrument of unilateral influence by controlling access to financial markets. The deliberate uncertainty of key terminological categories creates opportunities for regulatory arbitrage and structurally reproduces taxonomic plurality as a natural feature of the new environment. The central paradox of the modern regulatory order - the persistent gap between the declarative level of multilateral obligations and the operational level of their implementation - generates collisions between the principle of non-discrimination in trade and the extraterritoriality of climate instruments, between the universal nature of the Paris Agreement and the selective nature of real practices, as well as between the physical nature of the climate problem and the segmented architecture of the response to it.

The proposed framework allows us to reinterpret a number of phenomena - regulatory competition, the extraterritoriality of climate instruments, the fragmentation of global value chains in green sectors, the intentional ambiguity of regulatory categories as interconnected manifestations of a single structural process. For economies that are not among the leading architects of the new order,

understanding the structural nature of taxonomic plurality and localized regulatory logic is a prerequisite for developing realistic strategies for integration into green value chains and for building their own regulatory space that retains strategic autonomy while complying with international obligations. For Ukraine, these analytical foundations have direct practical significance for post-war reconstruction grounded in sustainable development. Further research within the established framework involves conceptualizing the behavioral foundations of localized logic through the apparatus of game theory, analyzing climate-technological decoupling as a limiting form of this logic, and investigating the structural consequences of the new regulatory order for the Global South.

**Declaration on the use of artificial intelligence.** The authors declare that generative artificial intelligence tools (Grammarly for Windows, Grammarly Inc.) were used during the preparation of this manuscript exclusively for the purposes of linguistic editing, stylistic polishing, and technical structuring of the text in accordance with the journal's formatting requirements. The conceptual framework, theoretical argumentation, empirical analysis, and conclusions presented in the article constitute the authors' own intellectual contribution and were not generated by artificial intelligence.

#### References:

1. Brunel, C., & Levinson, A. (2013). Measuring Environmental Regulatory Stringency. OECD Trade and Environment Working Papers, No. 2013/05. OECD Publishing. <http://dx.doi.org/10.1787/5k41t69f6f6d-en>
2. Burkart, K. (2009). How do You Define the "Green" Economy. MNN - Mother Nature Network. <https://www.mnn.com/green-tech/research-innovations/blogs/how-do-you-define-the-green-economy>
3. Chala, V., & Orlovska, Yu. (2021). Green economy development: Methodological approach. *Baltic Journal of Economic Studies*, 7(3), 203-208. <http://www.baltijapublishing.lv/index.php/issue/article/view/1203/1242>
4. Clift, R., & Wright, L. (2000). Relationships between Environmental Impacts and Added Value along the Supply Chain. *Technological Forecasting and Social Change*, 65, 281-295. [http://dx.doi.org/10.1016/S0040-1625\(99\)00055-4](http://dx.doi.org/10.1016/S0040-1625(99)00055-4)
5. Panchenko, V.G., & Reznikova, N.V. (2016). Neoproteksionizm yak instrument usunennia vnutrishnoi superechnosti liberalizmu [Neoprotectionism as a tool for resolving the internal contradiction of liberalism]. *Efektivna ekonomika*, 1, 1-6. <http://www.economy.nayka.com.ua/?op=1&z=5781> [in Ukrainian].
6. Sally, R. (1998). Classical liberalism and international economic order: studies in theory and intellectual history. London: Routledge. 186 p. <https://ndl.ethernet.edu.et/bitstream/123456789/1678/1/5.pdf>
7. Ivashchenko, O.A., & Reznikova, N.V. (2016). Problema ekonomichnoho rozvytku ta zrostannia v konteksti podolannia hlobalnykh asymetrii [The problem of economic development and growth in the context of overcoming global asymmetries]. *Visnyk Odeskoho natsionalnoho universytetu. Ekonomika*, 21(1), 55-58. [http://liber.onu.edu.ua/pdf/vestniki/VisnEconom\\_21\\_1\\_16.pdf](http://liber.onu.edu.ua/pdf/vestniki/VisnEconom_21_1_16.pdf) [in Ukrainian].
8. Ivashchenko, O.A., & Reznikova, N.V. (2017). Perspektyvy formuvannia novykh tsentriv ekonomichnoho zrostannia v umovakh novoi normy svitovoi ekonomiky yak proiav neozalezhnosti [Prospects for the formation of new centers of economic growth in the conditions of the new normal of the world economy as a manifestation of neo-dependence]. *Investytsii: praktyka ta dosvid*, 11, 5-9 [in Ukrainian].
9. Reznikova, N., & Grod, M. (2024). Institutionalization of climate change combat in the EU and socio-economic effects of industry decarbonization. *Actual Problems of International Relations*, 158(1), 59-69. <https://doi.org/10.17721/apmv.2024.158.1.59-69>
10. Panchenko, V.G., & Pinchuk, Yu.V. (2024). Dekaplinh yak nova forma realizatsii mizhnarodnoi ekonomichnoi polityky SSHA i KNR [Decoupling as a new form of implementation of international economic policy of the USA and China]. *Investytsii : praktyka ta dosvid*, 9, 51-58. <https://doi.org/10.32702/2306-6814.2024.9.51> [in Ukrainian].
11. Tsybuliak, A.H. (2015). Naukovi osnovy ekolohizatsii svitovoho vyrobnytstva [Scientific foundations of greening global production]. *Stratehiia rozvytku Ukrainy (ekonomika, sotsiologhiia, pravo)*, 2, 124-127. <https://jrn1.kai.edu.ua/index.php/SR/article/view/14100> [in Ukrainian].
12. Tsybuliak, A.H. (2016). Henezys rushiinykh syl ekolohizatsii mizhnarodnykh torhovelykh vidnosyn [Genesis

of driving forces of greening international trade relations]. *Skhidna Yevropa: ekonomika, biznes ta upravlinnia*, 3, 37-40. <http://srd.pgasa.dp.ua:8080/handle/123456789/1081> [in Ukrainian].

13. Tsybuliak, A. (2025). Ekolohichni imperatyv paradyhmy stalosti vs pravo na rozvytok: u poshukakh instytut-siinykh mekhanizmiv dosiahnennia systemnoho kompromisu [Ecological imperative of the sustainability paradigm vs the right to development: in search of institutional mechanisms for achieving systemic compromise]. *Efektivna ekonomika*, 4. <https://doi.org/10.32702/2307-2105.2025.4.1> [in Ukrainian].

14. Tsybuliak, A. (2025). Evolution of theories of ecological modernization as a manifestation of the increasing risk of the international economy: actualization of sustainable business practices in the conditions of digital transition. *Ekonomichniy prostir*, 201, 370-377. <https://doi.org/10.30838/EP.201.370-377>

15. Reznikova, N.V., & Grod, M.I. (2023). Formuvannia instytutsiinoi pidtrymky rozvytku tsyrkuliarnoi ekonomiky ta yii staloho finansuvannia v Yevropeiskomu Soiuzi [Formation of institutional support for the development of the circular economy and its sustainable financing in the European Union]. *Ekonomika Ukrainy*, 11(744), 52-75. <https://doi.org/10.15407/economyukr.2023.11.052> [in Ukrainian].

16. Grod, M., & Reznikova, N. (2024). Rol YeTsB u rozvytku tsyrkuliarnoi ekonomiky v YeS [The role of the ECB in the development of the circular economy in the EU]. *Investytsii: praktyka ta dosvid*, 21, 39-48. <https://doi.org/10.32702/2306-6814.2024.21.39> [in Ukrainian].

17. Grod, M. (2024). Perspektyvy ozelenennia finansovoi systemy dlia zelenoi deindustrializatsii YeS: novi instrumenty finansovoi polityky dlia rozvytku tsyrkuliarnoi ekonomiky [Prospects for greening the financial system for green deindustrialization of the EU: new financial policy instruments for the development of the circular economy]. *Investytsii : praktyka ta dosvid*, 14, 139-146. <https://doi.org/10.32702/2306-6814.2024.14.139> [in Ukrainian].

18. Panchenko, V., Ptashchenko, O., Reznikova, N., & Karp, V. (2025). Bahatovymirnist problem sotsialno-ekonomichnoho rozvytku v umovakh hlobalnykh vyklykiv: instytutsiini ramky polityky modernizatsii [Multidimensionality of socio-economic development problems in the context of global challenges: institutional frameworks of modernization policy]. *Ekonomichniy prostir*, 199, 86-98. <https://doi.org/10.30838/EP.199.86-98> [in Ukrainian].

19. Rusak, D., Reznikova, N., & Ivashchenko, O. (2022). Vyklyky upravlinniu ryzykamy i stratehichnomu planuvanniu vyrobnychkykh protsesiv u hlobalnykh lantsiuhakh stvorennia vartosti v umovakh kryzy v sferi okhorony zdorovia i klimatychnykh zmin [Challenges to risk management and strategic planning of production processes in global value chains in the context of health crises and climate change]. *Ahrosvit*, 21, 5-12. <https://doi.org/10.32702/2306-6814.2022.21.5> [in Ukrainian].

20. Panchenko, V.G., & Reznikova, N.V. (2025). Mizhnarodni stratehii ekonomichnoho rozvytku [International strategies of economic development]. Kyiv: AhrarMedia. 471 p. [https://www.iir.edu.ua/sites/default/files/2025-04/Reznikova\\_navch\\_posib\\_2025\\_A5.pdf](https://www.iir.edu.ua/sites/default/files/2025-04/Reznikova_navch_posib_2025_A5.pdf) [in Ukrainian].

21. Ptashchenko, O.V., & Arkhypova, D.Ye. (2020). Hlobalni problemy liudstva: stan i perspektyvy vyrishennia [Global problems of humanity: state and prospects for solution]. *Biznes Inform*, 10, 478-484. <https://doi.org/10.32983/2222-4459-2020-10-478-484> [in Ukrainian].

22. Duhinets, H., Yatsenko, O., & Panchenko, V. (2024). Mizhnarodnyi dosvid povoiennoho vidnovlennia: tryhery sotsialno-ekonomichnoho rozvytku v umovakh detsentralizatsii [International experience of post-war recovery: triggers of socio-economic development in conditions of decentralization]. *Herald of Khmelnytskyi National University. Economic Sciences*, 328(2), 497-505. <https://doi.org/10.31891/2307-5740-2024-328-74> [in Ukrainian].

23. Yatsenko, O., Duhinets, H., & Panchenko, V.G. (2024). Yevrointehratsiini imperatyvy povoiennoho vidnovlennia Ukrainy na zasadakh stalosti: u poshukakh dzherel finansuvannia [European integration imperatives of post-war recovery of Ukraine on the basis of sustainability: in search of sources of financing]. *Visnyk Khmelnytskoho natsionalnoho universytetu. Serii: Ekonomichni nauky*, 5, 616-623. <https://doi.org/10.31891/2307-5740-2024-334-93> [in Ukrainian].

#### Список використаних джерел:

1. Brunel C., Levinson A. Measuring Environmental Regulatory Stringency. OECD Trade and Environment Working Papers. 2013. No. 2013/05. OECD Publishing. DOI: <http://dx.doi.org/10.1787/5k41t69f6f6d-en>

2. Burkart K. How do You Define the "Green" Economy. MNN - Mother Nature Network. 2009. URL: <https://www.mnn.com/green-tech/research-innovations/blogs/how-do-you-define-the-green-economy>

3. Chala V., Orlovska Yu. Green economy development: Methodological approach. *Baltic Journal of Economic Studies*. 2021. Vol. 7, No. 3. Pp. 203-208. URL: <http://www.baltijapublishing.lv/index.php/issue/article/view/1203/1242>

4. Clift R., Wright L. Relationships between Environmental Impacts and Added Value along the Supply Chain. *Technological Forecasting and Social Change*. 2000. Vol. 65. Pp. 281-295. DOI: [http://dx.doi.org/10.1016/S0040-1625\(99\)00055-4](http://dx.doi.org/10.1016/S0040-1625(99)00055-4)

5. Панченко В. Г., Резнікова Н. В. Неопротекціонізм як інструмент усунення внутрішньої суперечності лібералізму. *Ефективна економіка*. 2016. № 1. С. 1-6. URL: <http://www.economy.nayka.com.ua/?op=1&z=5781>

6. Sally R. Classical liberalism and international economic order: studies in theory and intellectual history. London: Routledge. 1998. 186 p. URL: <https://ndl.ethernet.edu.et/bitstream/123456789/1678/1/5.pdf.pdf>

7. Іващенко О. А., Резнікова Н. В. Проблема економічного розвитку та зростання в контексті подолання

глобальних асиметрій. Вісник Одеського національного університету. Економіка. 2016. Т. 21, № 1. С. 55-58. URL: [http://liber.onu.edu.ua/pdf/vestniki/VisnEconom\\_21\\_1\\_16.pdf](http://liber.onu.edu.ua/pdf/vestniki/VisnEconom_21_1_16.pdf)

8. Іващенко О. А., Резнікова Н. В. Перспективи формування нових центрів економічного зростання в умовах нової норми світової економіки як прояв незалежності. Інвестиції: практика та досвід. 2017. № 11. С. 5-9.

9. Reznikova N., Grod M. Institutionalization of climate change combat in the EU and socio-economic effects of industry decarbonization. Actual Problems of International Relations. 2024. Vol. 158, No. 1. Pp. 59-69. DOI: <https://doi.org/10.17721/apmv.2024.158.1.59-69>

10. Панченко В. Г., Пінчук Ю. В. Декаплінг як нова форма реалізації міжнародної економічної політики США і КНР. Інвестиції : практика та досвід. 2024. № 9. С. 51-58. DOI: <https://doi.org/10.32702/2306-6814.2024.9.51>

11. Цибуляк А. Г. Наукові основи екологізації світового виробництва. Стратегія розвитку України (економіка, соціологія, право). 2015. № 2. С. 124-127. URL: <https://jrn.kai.edu.ua/index.php/SR/article/view/14100>

12. Цибуляк А. Г. Генезис рушійних сил екологізації міжнародних торговельних відносин. Східна Європа : економіка, бізнес та управління. 2016. № 3. С. 37-40. URL: <http://srd.pgasa.dp.ua:8080/handle/123456789/1081>

13. Цибуляк А. Екологічний імператив парадигми сталості vs право на розвиток: у пошуках інституційних механізмів досягнення системного компромісу. Ефективна економіка. 2025. № 4. DOI: <https://doi.org/10.32702/2307-2105.2025.4.1>

14. Tsybuliak A. Evolution of theories of ecological modernization as a manifestation of the increasing risk of the international economy : actualization of sustainable business practices in the conditions of digital transition. Економічний простір. 2025. № 201. С. 370-377. DOI: <https://doi.org/10.30838/EP.201.370-377>

15. Резнікова Н. В., Грод М. І. Формування інституційної підтримки розвитку циркулярної економіки та її сталого фінансування в Європейському Союзі. Економіка України. 2023. № 11(744). С. 52-75. DOI: <https://doi.org/10.15407/economyukr.2023.11.052>

16. Грод М., Резнікова Н. Роль ЄЦБ у розвитку циркулярної економіки в ЄС. Інвестиції : практика та досвід. 2024. № 21. С. 39-48. DOI: <https://doi.org/10.32702/2306-6814.2024.21.39>

17. Грод М. Перспективи озеленення фінансової системи для зеленої деіндустріалізації ЄС: нові інструменти фінансової політики для розвитку циркулярної економіки. Інвестиції: практика та досвід. 2024. № 14. С. 139-146. DOI: <https://doi.org/10.32702/2306-6814.2024.14.139>

18. Панченко В., Птащенко О., Резнікова Н., Карп В. Багатовимірність проблем соціально-економічного розвитку в умовах глобальних викликів: інституційні рамки політики модернізації. Економічний простір. 2025. № 199. С. 86-98. DOI: <https://doi.org/10.30838/EP.199.86-98>

19. Русак Д., Резнікова Н., Іващенко О. Виклики управлінню ризиками і стратегічному плануванню виробничих процесів у глобальних ланцюжках створення вартості в умовах кризи в сфері охорони здоров'я і кліматичних змін. Інвестиції: практика та досвід. 2022. № 21. С. 5-12. DOI: <https://doi.org/10.32702/2306-6814.2022.21.5>

20. Панченко В. Г., Резнікова Н. В. Міжнародні стратегії економічного розвитку : навч. посібник. Київ : АграрМедіа. 2025. 471 с. URL: [https://www.iir.edu.ua/sites/default/files/2025-04/Reznikova\\_navch\\_posib\\_2025\\_A5.pdf](https://www.iir.edu.ua/sites/default/files/2025-04/Reznikova_navch_posib_2025_A5.pdf)

21. Птащенко О. В., Архипова Д. Є. Глобальні проблеми людства: стан і перспективи вирішення. Бізнес Інформ. 2020. № 10. С. 478-484. DOI: <https://doi.org/10.32983/2222-4459-2020-10-478-484>

22. Дугінець Г., Яценко О., Панченко В. Міжнародний досвід повоєнного відновлення: тригери соціально-економічного розвитку в умовах децентралізації. Herald of Khmelnytskyi National University. Economic Sciences. 2024. Vol. 328, No. 2. Pp. 497-505. DOI: <https://doi.org/10.31891/2307-5740-2024-328-74>

23. Яценко О., Дугінець Г., Панченко В. Г. Євроінтеграційні імперативи повоєнного відновлення України на засадах сталості: у пошуках джерел фінансування. Вісник Хмельницького національного університету. Серія: Економічні науки. 2024. № 5. С. 616-623. DOI: <https://doi.org/10.31891/2307-5740-2024-334-93>

Дата надходження статті: 01.04.2026 р.

Дата прийняття статті до друку: 23.04.2026 р.

Дата публікації (оприлюднення) статті: 12.05.2026 р.

Стаття поширюється на умовах ліцензії Creative Commons Attribution License International CC-BY.