



UDC: 330.3

<https://doi.org/10.59849/2409-4838.2026.2.134>

ECONOMIC AND GEOPOLITICAL IMPLICATIONS OF RENEWABLE ENERGY INVESTMENT STRATEGIES IN CHINA, THE EU, AND THE UNITED STATES

Tarlan İlqar Guliyev 

Azerbaijan State University of Economics, Baku, Azerbaijan
tguliyev3228@gmail.com

This article examines how renewable energy investment strategies in China, the European Union, and the United States are reshaping global economic relations and accelerating a reconfiguration of geopolitical power. Drawing on literature in energy geopolitics, international political economy, and global value chain theory, the study shows that the energy transition has shifted strategic competition away from fossil-fuel resources toward technologies, standards, and critical minerals. China's dominance in manufacturing and mineral processing, the EU's regulatory and institutional leadership, and the U.S. emphasis on innovation and industrial policy create distinct but interdependent foundations of power.

To explain the structural dynamics emerging from their interaction, the article introduces the Triangular Strategic Reconfiguration Model (TSRM), which conceptualizes how these three actors continually shape one another's strategies and, in turn, reorganize global supply chains, investment flows, and governance structures. The findings demonstrate that renewable energy is generating new forms of interdependence under tension, with significant implications for countries outside the strategic triangle and for the future architecture of global energy governance.

Keywords: Renewable Energy Investment, Energy Geopolitics, Economic Interdependence, Global Value Chains, Critical Minerals

INTRODUCTION

The global shift toward renewable energy has become one of the most defining economic and geopolitical transformations of the 21st century. As countries accelerate clean-energy deployment to reduce fossil-fuel dependence, renewable energy investments have emerged as both economic drivers and strategic tools in international relations. Total energy investment exceeded USD 3 trillion in 2024, with around USD 2 trillion directed to clean energy technologies, indicating that the energy transition is also a major reallocation of global capital [8, p. 8]. China, the European Union, and the United States three central actors in the global energy transition shape investment strategies, technological standards, and supply-chain governance that influence the structure of the world economy. In 2024, China invested almost USD 680 billion in clean energy, compared with USD 370 billion in the European Union and more than USD 300 billion in the United States, highlighting the central role of these three actors in the emerging renewable energy order [8, p. 9]. Understanding how their renewable energy investment strategies interact with geopolitical dynamics is scientifically important because it provides insight into the emerging renewable energy order, where technological leadership, critical minerals, and cross-border infrastructure reconfigure global interdependence and power distribution.

The purpose of this article is to analyze the economic and geopolitical implications of renewable energy investment strategies in China, the European Union, and the United States. By focusing on the theoretical and conceptual foundations of global renewable energy politics, the study aims to identify how these strategies reshape international economic relations and influence patterns of global power in the early stages of the energy transition. While existing research examines individual aspects of the energy transition, there remains limited conceptual analysis of how major-power renewable investment strategies collectively transform global economic relations and geopolitical structures. This article addresses this gap by examining the China–EU–U.S. strategic triangle and introducing a conceptual framework that explains the structural dynamics emerging from their interaction.

This article examines theoretical perspectives on energy transitions, interdependence, and global economic restructuring; analyzes scholarly debates on renewable energy investments and their geopolitical significance; conceptually compares the renewable energy investment approaches of China, the European Uni-

on, and the United States; and identifies the emerging economic and political implications of these strategies for the global energy order.

This study employs a conceptual and qualitative research approach, drawing on academic literature, institutional reports, and theoretical frameworks related to energy geopolitics and international political economy. The analysis synthesizes prior research to identify structural patterns in investment strategies and their macro-level implications. Descriptive information on global renewable energy trends is included for context, without engaging in detailed empirical case studies. This methodological approach aligns with the goal of establishing the theoretical and analytical basis for broader, future research.

This article draws on a combination of academic and institutional sources, including literature on energy geopolitics (Overland, Scholten, Sovacool), global renewable energy governance, and economic interdependence. Major international organizations such as the International Energy Agency (IEA), the International Renewable Energy Agency (IRENA), and the World Bank provide essential data and analytical frameworks on global investment trends and transition pathways. These sources form the conceptual foundation for understanding how renewable energy investment strategies influence global economic and geopolitical structures.

Given its focus on conceptual analysis, this article does not include statistical modeling or econometric evaluation. Instead, it provides a theoretical, conceptual comparative overview of major actors' strategies. Detailed empirical analysis, regional case studies, and country-specific data interpretation are beyond the scope of this article and are reserved for more comprehensive research.

MAIN PART

1. Literature review

The academic and institutional literature consistently highlights that renewable energy investment has become a central driver of global economic change. According to the International Renewable Energy Agency, renewables accounted for more than 92% of global power capacity additions in 2024, while investment in renewable power capacity reached a record level [10, p. 1]. The International Energy Agency similarly notes that clean energy now attracts around USD 2 trillion, nearly twice as much investment as fossil fuels (oil, gas and coal) [8, p. 8]. At the same time, major imbalances persist, as emerging market and developing economies outside China account for only around 15% of global clean energy spending [8, p. 8]. Climate policy is often driven by domestic distributive conflicts [1, p. 6]. At the same time, the global reallocation of capital toward clean energy reflects strategic industrial positioning, as states compete to capture value within emerging clean-technology sectors. This shift is illustrated in Figure 1, which shows the widening gap between clean energy and fossil fuel investment over the period 2015–2024.

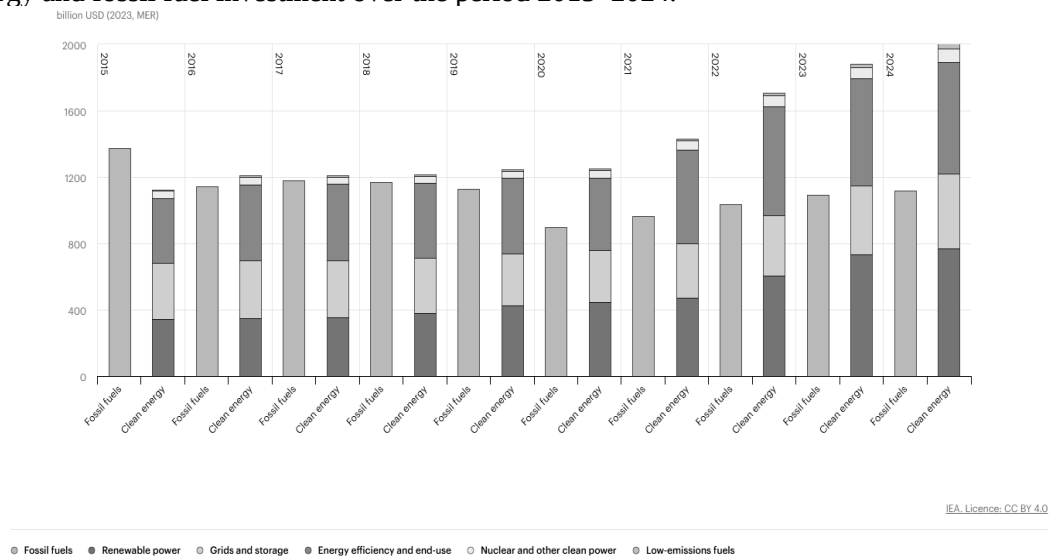


Fig. 1. Global investment in clean energy and fossil fuels, 2015-2024

Source: IEA (2024), *Global investment in clean energy and fossil fuels, 2015–2024*, IEA, Paris, CC BY 4.0.

As Vakulchuk, Overland, and Scholten emphasize, renewable energy has significant geopolitical implications, affecting international relations, resource governance, and the global balance of power [6, p. 2-4]. Clean energy transitions have increasingly been linked to trade and industrial competition among major economies, particularly China, the United States, and Europe, especially in sectors such as solar and electric vehicles. The International Energy Agency identifies China as the largest global investor in clean energy, accounting for a substantial share of global spending, while the United States and the European Union represent other major clean-energy investment hubs [8, p. 9].

A large body of literature examines how renewable energy investments reshape international economic relations. Scholten argues that renewable energy systems reshape global energy relations by creating new forms of interdependence across technology, infrastructure, and supply chains, rather than dependence on geographically concentrated fuel resources [4, p. 4-7]. Unlike fossil fuels, which rely on geographically concentrated reserves, renewable energy supply chains rely on manufacturing capabilities, intellectual property, trade networks, and financial systems.

In international political economy, energy transition is deeply embedded in state policy, governance, and political economy dynamics, with governments playing a central role in shaping energy systems and investment patterns. Thus, renewable energy investments can also be viewed as instruments of foreign policy, development finance, and industrial strategy to build influence through technology transfer, development assistance, and cross-border infrastructure. For example, China's Belt and Road Initiative includes extensive solar, wind, and grid investments, which scholars interpret as tools for strengthening long-term economic ties and geopolitical presence. Likewise, the EU uses regulatory tools such as carbon pricing, standard-setting, and energy market integration, enabling it to strengthen its influence in global clean-tech markets.

The literature therefore shows that renewable energy investments act both as economic multipliers and tools of international engagement, affecting trade relations, supply-chain architecture, and cross-border energy cooperation.

Renewable energy transitions are reshaping geopolitical dynamics by shifting strategic competition away from fossil fuels and toward technologies, minerals, and supply chains. As renewables reduce traditional dependence on oil and gas exporters, they introduce new competition over manufacturing and infrastructure control. A central driver of these new dependencies is the rising demand for critical minerals such as lithium, cobalt, nickel, and rare earth elements. These materials are essential for solar panels, batteries, and electric vehicles. The World Bank projects that demand for key energy-transition minerals such as lithium, cobalt, and graphite could grow by up to 500% by 2050 [11, p. 1]. Because mineral extraction and especially processing are geographically concentrated China dominates a large share of refining and battery-material processing major economies face heightened vulnerability within these supply chains [5, p. 30-32].

These mineral dependencies are closely linked to renewable energy value chains, with major economies occupying different but interdependent roles in clean-energy production and deployment. Trade disputes in renewable energy sectors illustrate growing economic competition. Thus, governments increasingly deploy industrial policy tools to support domestic clean-energy industries, reduce supply-chain risks, and compete in emerging clean-technology markets.

2. Conceptual analysis of major-power strategies

The renewable energy strategies of China, the European Union (EU), and the United States (U.S.) shape global investment patterns, supply chains, and competitive dynamics. Although these actors differ in governance models, industrial capacities, and geopolitical intentions, the literature consistently identifies them as major players of the emerging renewable energy order. This section provides a conceptual analysis of their strategies and the theoretical implications for global economic and geopolitical structures. Figure 2 highlights the scale of this concentration by comparing clean energy investment across major countries and regions in 2019 and 2024.

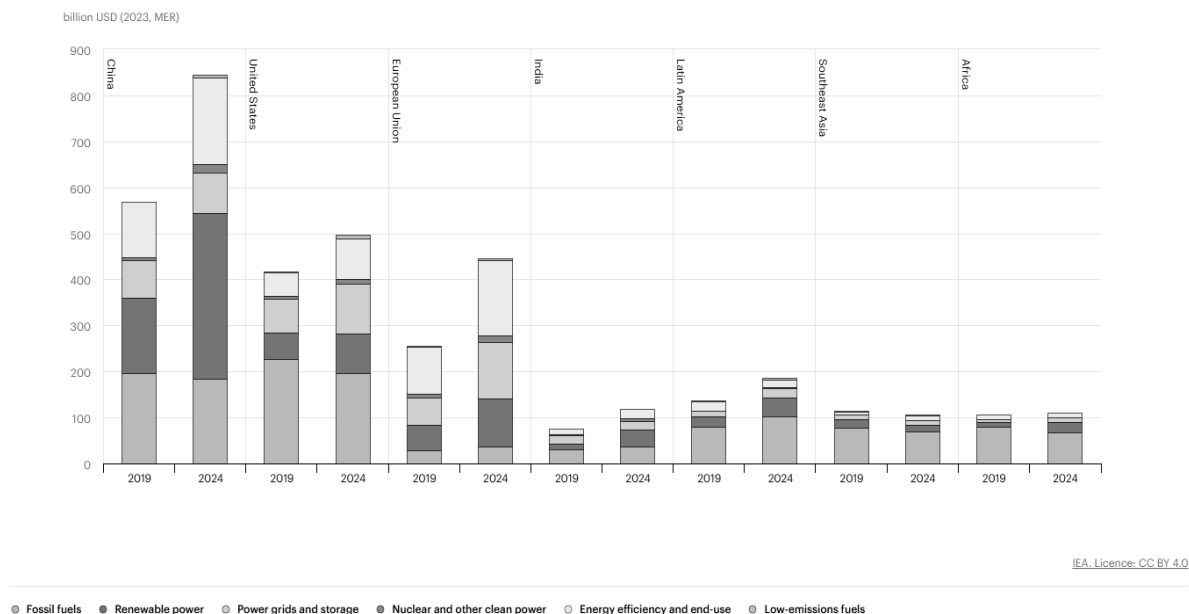


Fig. 2. Annual investment in clean energy by selected country and region, 2019 and 2024

Source: IEA (2024), *Annual investment in clean energy by selected country and region, 2019 and 2024*, IEA, Paris, CC BY 4.0.

As figure 2 shows, China, the European Union, and the United States account for a disproportionately large share of global clean energy investment, reinforcing their central role in shaping the renewable energy order. China has emerged as the world's dominant actor in renewable energy through long-term industrial planning, large-scale manufacturing, and export-oriented policies. China's dominance is especially visible in solar supply chains: its share across all major manufacturing stages of solar panels exceeds 80%, which is more than double its share of global PV demand [9, p. 7]. Scholars emphasize that China's approach is embedded in a broader developmental state model, where coordinated industrial policy and state-led finance accelerate clean-tech deployment and global competitiveness [3, p. 43-44]. From a global value chain perspective, control over upstream and midstream segments can enhance a country's ability to influence production networks, technological development, and market dynamics. This dominance enables China to shape global technology prices and market access. For example, China's renewable investments abroad, including through the Belt and Road Initiative (BRI), can be interpreted as instruments of geo-economic influence that link developing countries to Chinese technology, financing, and standards. From a geo-economic perspective, control over key industrial sectors can enable states to translate economic capabilities into geopolitical influence [7, p. 2-4]. By capturing clean-energy value chains, such countries can enhance their structural power within the evolving renewable energy order. Thus, this positions China not only as a dominant producer but as a central actor in renewable energy value chains, capable of influencing global price dynamics and technological diffusion. Figure 3 further illustrates the extent of China's dominance across key stages of the solar PV manufacturing chain.

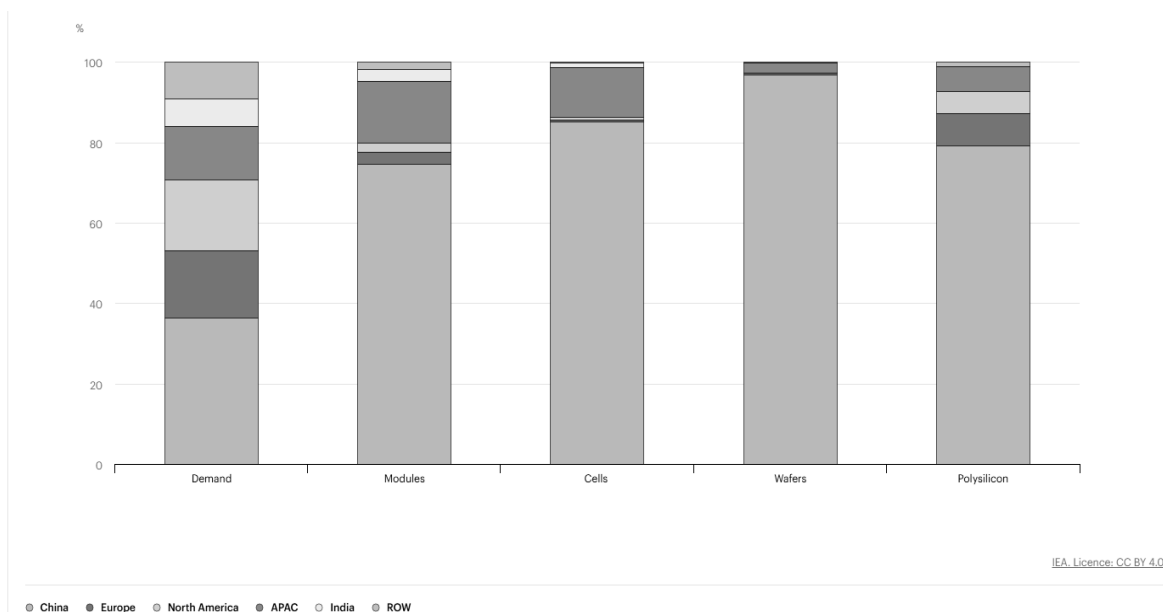


Fig. 3. China's share of global solar PV demand and manufacturing stages
Source: IEA (2022), *Solar PV Global Supply Chains*, IEA, Paris, CC BY 4.0.

The EU's renewable energy strategy is primarily institutional and regulatory, reflecting its established role as a "normative power" that shapes environmental governance through rules, standards, and market integration. The EU wields influence through market rules, standards, finance, and cross-border integration rather than manufacturing dominance. Access to large markets like the EU often depends on compliance with regulatory standards, which gives it a form of market power. The EU is also a leading provider of climate finance and green investment initiatives, such as the InvestEU program and Horizon Europe. Scholten highlights that regional energy integration can strengthen governance structures and cooperation in energy systems [4, p. 9-12]. As the EU's energy strategy emphasizes interconnected electricity markets and regional grid cooperation, such regional integration enhances the EU's role as an energy governance hub. By shaping grid codes, infrastructure planning, and market rules, the EU extends its geopolitical influence through institutional mechanisms rather than direct resource control. This enables the EU to exert indirect geopolitical influence by externalizing its regulatory framework and embedding its standards within global markets.

The United States adopts a technology-driven and innovation-centered strategy grounded in its advanced research ecosystem, private-sector leadership, and intellectual property advantages. Historically more fragmented in energy policy, the U.S. has accelerated its renewable investment trajectory in recent years. Clean energy investment in the United States exceeded USD 300 billion in 2024, around 1.6 times the 2020 level and well above the amount invested in fossil fuels [8, p. 9]. U.S. leadership in R&D for solar, battery storage, hydrogen, and advanced grid technologies is supported by national laboratories, universities, and private firms. Innovation leadership allows the U.S. to shape high-value segments of renewable energy value chains. The 2022 Inflation Reduction Act marks a structural transformation in U.S. industrial policy. The IRA introduces massive subsidies, tax incentives, and domestic content requirements designed to attract global clean-tech investment to the U.S. and reduce dependency on foreign supply chains. The IRA is widely viewed as a turning point in U.S. geo-economic strategy because it links industrial competitiveness with climate objectives through large-scale subsidies and domestic production incentives. The United States increasingly frames renewable energy as part of strategic competition with China, promoting "friend-shoring" and alliances in critical minerals and technology supply chains. This aligns with theories of interdependence, which emphasize that asymmetrical dependence creates vulnerability and incentives for states to adjust and reduce such dependencies [2, p. 10-13].

Taken together, these strategies form a distinct strategic triangle among China, the EU, and the United States. The next section develops a Triangular Strategic Reconfiguration Model (TSRM) to explain how this interaction reshapes global economic and geopolitical structures.

3. The Triangular Strategic Reconfiguration Model

The Triangular Strategic Reconfiguration Model (TSRM) captures how China, the EU, and the United States interact in shaping the renewable energy order. Each actor anchors a different foundation of power: China controls manufacturing and mineral processing, the EU shapes standards and market rules, and the U.S. drives technological innovation and high-value industrial policy. Their strategies do not operate separately; they continually reshape one another. The structure and dynamics of the TSRM are illustrated in Figure 4.

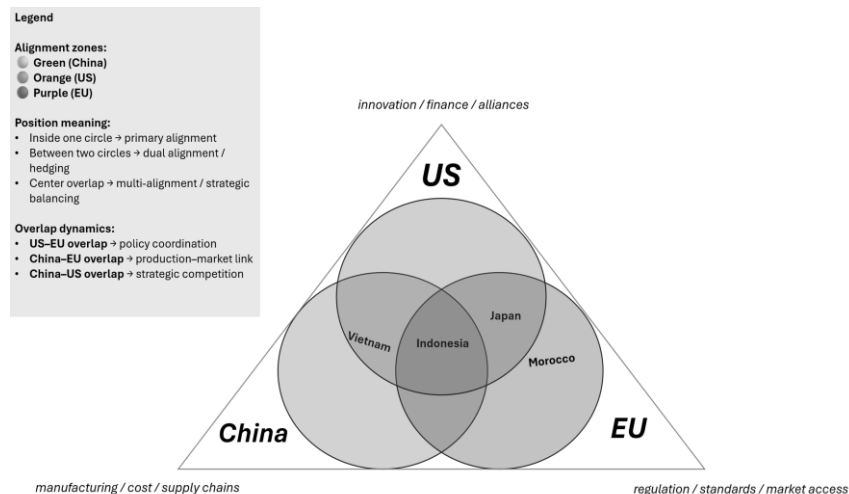


Fig. 4. The Triangular Strategic Reconfiguration Model (TSRM).

Overlapping circles represent the strategic spheres of China, the European Union, and the United States. Positions of selected countries illustrate varying degrees of alignment, hedging, and repositioning within the evolving global renewable energy order.

The triangular structure represents three primary poles of power defined by distinct sources of advantage: manufacturing and supply-chain control (China), regulatory and market power (European Union), and innovation-driven industrial policy (United States). The overlapping spheres illustrate how countries position themselves within this system. Alignment within a single sphere reflects primary alignment with a dominant power, while positioning between spheres indicates dual alignment or hedging. The central overlap captures multi-alignment, where countries leverage competing systems simultaneously. These positions are not fixed, but shift in response to changes in policy, market incentives, and geopolitical dynamics.

China's manufacturing scale pressures global prices and secures export influence, prompting the EU and U.S. to use subsidies, standards, and diversification plans to reduce exposure. These countermeasures then push China to upgrade technology, expand processing abroad, and deepen ties with mineral-rich partners. At the same time, the EU's regulatory rules on carbon intensity, sustainability, and supply-chain transparency force both China and the U.S. to adjust production practices if they want access to the world's largest integrated market. U.S. innovation and the Inflation Reduction Act attract global firms into its clean-tech ecosystem, drawing investment away from Europe and Asia and triggering competitive industrial responses from both.

Recent policy developments illustrate these dynamics in concrete terms. After the United States adopted the Inflation Reduction Act, the European Commission launched the Green Deal Industrial Plan in 2023, and the Net-Zero Industry Act later set a target for European net-zero manufacturing capacity to meet at least 40% of the EU's annual deployment needs by 2030 [12, p. 2; 13, p. 12]. U.S. supply-chain policy also reshaped alignment beyond the triangle: in March 2023, the United States and Japan signed a Critical Minerals Agreement whose stated objective is to strengthen and diversify critical-minerals supply chains and promote electric-vehicle battery technologies [14, p. 1]. Together, these cases show that strategic moves by one pole

of the triangle trigger institutional, industrial, and trade-policy adjustments by the others, while also pulling third countries into new patterns of supply-chain alignment.

This triangular interplay reshapes global markets in three clear ways. First, supply chains reorganize around political risk: firms relocate parts of production from China to Southeast Asia, India, and Mexico, while new mineral partnerships emerge across Africa and Latin America to meet Western diversification demands. These supply chains also remain highly dependent on trade, meaning that diversification does not eliminate interdependence but rather reorganizes it under new political and industrial conditions. Second, global price structures become more volatile as subsidies, export controls, and competing standards disrupt what used to be cost-driven markets. Third, technology diffusion accelerates but becomes more fragmented, with distinct “China-oriented,” “EU-compliant,” and “U.S.-aligned” industrial ecosystems emerging.

For countries outside the triangle, these shifts create both openings and constraints. These adjustments are already visible in concrete cases. Indonesia, for example, has tried to leverage its resource position more autonomously: since January 2020 it has prohibited nickel ore exports in order to push processing downstream, and leverage its natural-resource base for lithium-ion batteries. Morocco illustrates a different pattern of adaptation, aligning more closely with the EU’s regulatory and market orbit through the EU–Morocco Green Partnership, which supports long-term cooperation in energy transition, including renewable hydrogen development [15, p. 1]. Mineral-rich economies gain bargaining leverage as demand for lithium, cobalt, nickel, and rare earths rises sharply, but they also face pressure to align with one bloc’s standards or financing terms. Manufacturing aspirants such as Vietnam, Indonesia, and India receive investment diverted from China but remain vulnerable to sudden policy shifts in Washington or Brussels. Developing economies linked to China through renewable infrastructure gain access to cheaper technology but risk long-term dependency on Chinese financing and equipment. Conversely, countries aiming to export to Europe must absorb higher compliance costs but gain access to premium markets. These examples show that countries outside the triangle do not simply absorb external pressures; they reposition themselves by aligning with different poles, leveraging strategic resources, or adapting to emerging standards and market incentives.

Globally, the TSRM shows that renewable energy is not replacing geopolitics it is reconfiguring it. Power now derives less from owning fossil fuels and more from shaping value chains, standards, and mineral flows. Markets become more political, supply chains more contested, and economic opportunities increasingly determined by how states position themselves relative to the strategic triangle. This emerging order is defined by interdependence under tension: the three major powers rely on each other’s strengths even as they compete to control the rules and materials of the renewable economy.

As renewable energy investment becomes central to economic development, global governance institutions such as the IEA, IRENA, and the World Bank increasingly influence investment flows, technology pathways, and climate finance. However, the strategic rivalry among China, the EU, and the United States produces overlapping and sometimes conflicting governance spheres defined by standards, subsidies, and industrial policy. This results in a more fragmented and competitive governance landscape rather than a unified global framework.

CONCLUSION

This article examined how renewable energy investment strategies in China, the European Union, and the United States are reshaping global economic relations and accelerating a structural shift in geopolitical power. The analysis demonstrated that the clean-energy transition is not merely an environmental process but a comprehensive reconfiguration of value chains, industrial capacities, and strategic dependencies. China’s dominance in manufacturing and mineral processing, the EU’s regulatory and institutional influence, and the United States’ innovation-driven industrial policy each constitute distinct pillars of power within the emerging renewable energy order. The Triangular Strategic Reconfiguration Model (TSRM) developed in this study shows how these strategies interact, forcing continuous adaptation among the three actors and producing systemic effects on global markets, supply-chain geography, technology diffusion, and governance structures.

The findings align with a wide body of scholarship emphasizing that renewable energy investments now function as instruments of economic and geopolitical competition. Consistent with existing work, this article confirms that the energy transition shifts strategic attention from fossil-fuel reserves toward technolo-



gies, standards, and minerals. It also reinforces arguments that clean-energy value chains introduce new forms of interdependence grounded in manufacturing concentration, critical mineral processing, and regulatory asymmetries. However, whereas much of the literature treats China, the EU, and the U.S. as separate cases, this study emphasizes their relational dynamics and demonstrates how their strategies collectively shape the global energy order.

The core contribution of this article is the development of the Triangular Strategic Reconfiguration Model, which conceptualizes how China, the EU, and the United States constitute a mutually reinforcing strategic triangle in renewable energy politics. TSRM clarifies that it is the interaction rather than the isolated strategies of the three powers that drives global restructuring. The model demonstrates that supply chains reorganize in response to political risk, technology diffuses through competing industrial ecosystems, and market pricing becomes increasingly shaped by subsidies, standards, and export controls. It also reveals how countries outside the triangle experience asymmetric opportunities and pressures, depending on their mineral endowments, manufacturing ambitions, and alignment with competing governance spheres.

Future research should apply the TSRM to empirical case studies such as mineral-rich economies (Chile, Indonesia), manufacturing hubs (Vietnam, India), or regional energy markets (North Africa, Central Asia) to evaluate how triangular competition shapes local policy choices, bargaining power, and national development trajectories. Further work should examine how divergent standards and supply-chain security policies shape firm-level strategies and technological specialization across regions. An additional research avenue lies in assessing how evolving China–EU–U.S. interactions affect global governance institutions, climate finance mechanisms, and cross-border grid development.

REFERENCES

1. Aklin, M., & Mildenerger, M. / Prisoners of the wrong dilemma: Why distributive conflict, not collective action, characterizes the politics of climate change. *Global Environmental Politics*, - 2020, - p. 4-27.
2. Keohane, R. O., & Nye, J. S. / Power and interdependence: World politics in transition. Little, Brown, - 1977, - p. 3-18.
3. Mathews, J. A., & Tan, H. / China's renewable energy revolution. *Nature*, - 2015, - p. 41-45.
4. Scholten, D. / The geopolitics of renewables. Springer, - 2018, - p. 3-15.
5. Sovacool, B. K., Ali, S., Bazilian, M., Radley, B., Nemery, B., Okatz, J., & Mulvaney, D. R. / Sustainable minerals and metals for a low-carbon future. *Science*, - 2020, - p. 30-33.
6. Vakulchuk, R., Overland, I., & Scholten, D. / Renewable energy and geopolitics: A review. *Energy Research & Social Science*, - 2020, - p. 2-9.
7. Wigell, M., & Vihma, A. / Geopolitics versus geo-economics: The case of Russia's geostrategy and the EU's response. *Geopolitics*, - 2016, - p. 2-10.
8. International Energy Agency / World Energy Investment 2024. Paris: IEA, - 2024, - p. 1-12.
9. International Energy Agency / Solar PV Global Supply Chains. Paris: IEA, - 2022, - p. 1-9.
10. International Renewable Energy Agency / Renewables in 2024: 5 key facts behind a record-breaking year. - 2025.
11. World Bank / Mineral production to soar as demand for clean energy increases. - 2020.
12. European Commission / A Green Deal Industrial Plan for the Net-Zero Age (COM/2023/62 final). - 2023, - p. 1-4.
13. European Commission / Proposal for a regulation on establishing a framework of measures for strengthening Europe's net-zero technology products manufacturing ecosystem (Net Zero Industry Act). - 2023, - p. 1-13.
14. Office of the United States Trade Representative / United States and Japan sign critical minerals agreement. - 2023.
15. European Commission / EU and Morocco launch Green Partnership on energy, climate and environment ahead of COP27. - 2022.



ÇİN, AVROPA İTTİFAQI VƏ AMERİKA BİRLƏŞMİŞ ŞTATLARINDA BƏRPA OLUNAN ENERJİYƏ İNVESTİSİYA STRATEGİYALARININ İQTİSADI VƏ GEOSİYASI TƏSİRLƏRİ

T.İ. Quliyev

Bu məqalə Çin, Avropa İttifaqı və Amerika Birləşmiş Ştatlarında bərpa olunan enerjiyə investisiya strategiyalarının qlobal iqtisadi münasibətləri necə yenidən formalaşdırdığını və geosiyasi gücün yenidən qurulmasını necə sürətləndirdiyini təhlil edir. Enerji geopolitikası, beynəlxalq siyasi iqtisad və qlobal dəyər zəncirləri nəzəriyyəsinə dair ədəbiyyata əsaslanaraq, tədqiqat göstərir ki, enerji keçidi strateji rəqabəti fosil yanacaq resurslarından texnologiyalara, standartlara və kritik minerallara doğru yönəlmişdir. Çinin istehsal və mineral emalındakı üstünlüyü, Avropa İttifaqının tənzimləyici və institusional liderliyi, eləcə də ABŞ-in innovasiya və sənaye siyasətinə verdiyi önəm fərqli, lakin qarşılıqlı asılı güc əsasları formalaşdırır.

Bu qarşılıqlı təsirdən yaranan struktur dinamikaları izah etmək üçün məqalədə Üçtərəfli Strateji Yenidənqurma Modeli (TSRM) təqdim olunur. Bu model həmin üç aktorun bir-birinin strategiyalarını davamlı şəkildə necə formalaşdırdığını və nəticə etibarilə qlobal təchizat zəncirlərini, investisiya axınlarını və idarəetmə strukturlarını necə yenidən təşkil etdiyini konseptuallaşdırır. Nəticələr göstərir ki, bərpa olunan enerji gərginlik şəraitində yeni qarşılıqlı asılılıq formaları yaradır və bu, strateji üçbucaqdan kənarda qalan ölkələr, eləcə də qlobal enerji idarəetmə sisteminin gələcək arxitekturası üçün mühüm nəticələr doğurur.

Açar sözlər: *Bərpa olunan enerjiyə investisiya, enerji geopolitikası, iqtisadi qarşılıqlı asılılıq, qlobal dəyər zəncirləri, kritik minerallar*

ЭКОНОМИЧЕСКИЕ И ГЕОПОЛИТИЧЕСКИЕ ПОСЛЕДСТВИЯ СТРАТЕГИЙ ИНВЕСТИРОВАНИЯ В ВОЗОБНОВЛЯЕМУЮ ЭНЕРГЕТИКУ В КИТАЕ, ЕС И США

Т.И. Гулиев

Данная статья анализирует, каким образом стратегии инвестирования в возобновляемую энергетику в Китае, Европейском союзе и Соединённых Штатах трансформируют глобальные экономические отношения и способствуют перераспределению геополитической силы. Опираясь на научную литературу в области энергетической геополитики, международной политической экономики и теории глобальных цепочек создания стоимости, исследование показывает, что энергетический переход смещает стратегическую конкуренцию от ископаемых ресурсов к технологиям, стандартам и критически важным минералам. Доминирование Китая в производстве и переработке сырья, регуляторное и институциональное лидерство ЕС, а также акцент США на инновациях и промышленной политике формируют различные, но взаимозависимые основы влияния.

Для объяснения структурной динамики, возникающей в результате их взаимодействия, в статье предлагается Модель треугольной стратегической реконфигурации (TSRM), которая показывает, каким образом эти три стороны постоянно влияют на стратегии друг друга и, в свою очередь, реорганизуют глобальные цепочки поставок, инвестиционные потоки и механизмы управления. Полученные результаты свидетельствуют о том, что возобновляемая энергетика формирует новые формы взаимозависимости в условиях напряжённости, что имеет важные последствия для стран, находящихся вне данного стратегического треугольника, а также для будущей архитектуры глобального энергетического управления.

Ключевые слова: *инвестиции в возобновляемую энергетику, энергетическая геополитика, экономическая взаимозависимость, глобальные цепочки создания стоимости, критические минералы*