



RESEARCH PAPER

The Impact of Great Power Politics on Mitigating the Challenges of Climate Change

Dr. Muhammad Munir¹ Muhammad Mahmood Sultan*² Alyas Ali Chaichi³

1. Dean, Faculty of Social Sciences & Humanities, Muslim Youth University, Islamabad, Pakistan
2. M S Scholar, Department of International Relations, Muslim Youth University, Islamabad, Pakistan
3. M S Scholar, Department of International Relations, Muslim Youth University, Islamabad, Pakistan

***Corresponding Author**

mahmoodsultan535@gmail.com

ABSTRACT

This study examines how great power politics affect efforts to mitigate climate change. Global climate change is a threat to both human life and the environment, and the degree of coordination and collaboration among major nations may either facilitate or obstruct progress in addressing the issue. This study gives an overview of the pertinent literature on the subject, emphasizing significant concepts and hypotheses as well as highlighting gaps in existing research. The research design used in the study comprises case studies of major power couples such as the United States and China, the European Union and Russia, and India and Japan. Data is collected using qualitative approaches and processed using thematic analysis. The findings indicate that, while major nations play an important role in climate change mitigation, geopolitical disputes, and internal politics can stymie collaboration.

KEYWORDS

Climate Change, Competition, Cooperation, Geopolitical Conflicts, Internal Politics, Policy Consequences

Introduction

Climate change is a global issue that is having a big impact on the planet. Climate change is impacting worldwide as temperatures continue to rise, sea levels rise, and extreme weather events grow more regularly. All countries must work together to solve the issue due to its complexity, and the actions of the world's most powerful countries frequently have an impact on this endeavor. Great power politics, or the acts and interactions of wealthy nations, may significantly affect how the world responds to climate change. The Paris Pact, a significant agreement in the fight against climate change enacted in 2015, was enacted in 2015, serves as an example of the importance of great power politics in this area. The Paris Agreement intends to restrict temperature rise to 1.5 degrees Celsius and keep global warming well below 2 degrees Celsius over pre-industrial levels. The agreement, which was ratified by 197 parties, including every major country in the globe, represents a significant advancement in combating climate change. However, several large nations, like the United States, which left the accord in 2017, have made it difficult to execute the Paris Accord. An important subject in international relations is how great power politics affect the level of concern about climate change. Even though large nations can be beneficial in combating climate change, their activities can also erode international cooperation in this area. Conflict and rivalry may be fostered by great power politics, hindering attempts to solve global issues like climate change. For instance, the trade war between the two superpowers between the United States and China has made it difficult

for them to work together to combat climate change. Their ability to work together to combat climate change has been impeded by tariffs placed on Chinese goods by the Trump administration and retaliatory tariffs placed by China. Policymakers and practitioners who want to support effective answers to this problem must comprehend the role of great power politics in climate change policies and practice. Great power politics' various effects on climate change may be investigated from several angles. For instance, the capacity of international organizations to coordinate and carry out climate change policies may be impacted by the influence of major powers on organizations like the United Nations Framework Convention on Climate Change. In addition, the balance of power among the major nations may affect their desire to work together to combat climate change, with some governments using the issue as a tool to further their geopolitical objectives.

What effect does great power politics have on reducing the effects of climate change? is the topic under investigation in this study. Analysis of the dynamics of great power politics and their effects on international cooperation on climate change, case studies of great powers and their responses to climate change, and the identification of best practices and policy recommendations for fostering effective cooperation among great powers in mitigating climate change challenges are the research's main objectives. Finally, the influence of great power politics on addressing the problems of climate change is a significant subject that calls for further research. Great powers, the most potent nations in the world order, can facilitate or block cooperation and coordination in the fight against climate change. For effective solutions to the problem and to ensure the planet's long-term sustainability, it is essential to comprehend the role of great power politics in dealing with climate change.

Literature Review

A successful solution to the large and complicated global problem of climate change requires collaboration and coordination among nations. Great countries have a significant impact on the global response to climate change due to their economic and political influence. Previous studies have focused on how great power politics affects how people throughout the world respond to climate change and the many factors that affect this behavior. The power dynamic is critical in both great power politics and climate change. The balance of power among them determines whether large nations want to collaborate in the fight against climate change and their ability to sway global policy. According to studies, powerful, big nations have more sway over international climate change policy and are more inclined to work together to find solutions (Karlsson-Vinkhuyzen & van Asselt, 2019). For instance, the United Powers has traditionally had a leading role in establishing international climate change policy as one of the most potent nations in the world. Another factor that affects global politics and climate change is leadership. Great power leaders may significantly influence the world's reaction to climate change by setting the agenda and enlisting support on a global scale. Studies have shown that the climate change leadership of major power leaders may spur international action on the problem (Gupta & Biermann, 2010). However, if powerful people are not committed to addressing climate change, leadership might stand in the way of collaboration. The importance of China's participation in global climate change governance has grown in recent years. Wang (2021) asserts that China has become a world leader in climate change governance, with the power to determine the direction of international climate change governance. He explores China's internal climate policy, global climate diplomacy, and participation in the execution of the Paris Agreement. Experts and academics in Pakistan are interested in how great power politics may help to lessen the effects of climate change. Great power politics, according to Raza and Naseem (2019), have a significant influence on global climate governance and may either facilitate or obstruct cooperation and

coordination in the fight against climate change. The study emphasized the importance of strong nations like the United States and China in developing international climate governance as well as how their actions might affect the success or failure of international efforts to combat climate change. In a similar vein, Ullah and Mahmood (2017) hypothesized that the global response to climate change is influenced by power dynamics between states and that the actions of great powers can either support or hinder such efforts. To combat climate change, the study emphasized the need for more coordination and collaboration among major powers as well as a more equal allocation of the burden of climate change adaptation and mitigation.

Global warming has the potential to have a significant impact on both human life and the environment. The impacts of climate change include increasing temperatures, sea level rise, a rise in the frequency of extreme weather events, and modifications to precipitation patterns. Human livelihoods are at risk as a result of these effects, especially in vulnerable places like coastal regions and tiny island nations (IPCC, 2018). Great countries have a crucial role to play in tackling the concerns of climate change as important international players. The actions of great countries can either encourage or hinder international cooperation and coordination in the fight against climate change. For instance, the United States has a significant responsibility to reduce emissions and assist international efforts to address climate change as one of the leading producers of greenhouse gases in the world (IPCC, 2018). Between large nations, climate change has ramifications for both cooperation and competition. On the one hand, major nations may collaborate to develop and implement global climate change solutions. For instance, the Paris Agreement, which was ratified by 195 countries, including all of the world's major powers, aims to limit global warming to far below 2°C over pre-industrial levels (UNFCCC, 2015). Great nations, on the other hand, could compete with one another for influence and resources in the fight against climate change, which could result in conflicts and wars. For instance, the growing dominance of China in the world's renewable energy market worries several Western nations (Bloomberg, 2020). Last but not least, major countries must be crucial in reducing the consequences of climate change. While competition and conflicts between large nations must be addressed, collaboration among them is essential for overcoming this global problem. Investigating how great power politics affect climate change mitigation is a crucial result.

The Role of China

China is the world's greatest emitter of greenhouse gases and plays a critical role in climate change mitigation. However, China's position as a great power has made it wary of committing to aggressive climate objectives for fear of limiting its economic growth and competitiveness (Chen, 2020). China's growing power in the international system may result in a more cooperative approach to climate change mitigation, particularly as it attempts to improve its image as a responsible global actor (Grossman & Lewis, 2021).

The Role of the United States

The United States is the second-largest greenhouse gas emitter and a crucial actor in international climate negotiations. However, the withdrawal of the Trump administration from the Paris Agreement in 2017 was a setback for global climate action (Hsu & Friedman, 2020). The Biden administration has subsequently entered the deal and vowed to cut greenhouse gas emissions, but the impact of domestic politics in the United States on international climate action remains unknown (Miller & Zheng, 2021).

The Role of the European Union

The European Union has been a climate pioneer, setting aggressive targets for decreasing greenhouse gas emissions. However, because of its modest percentage of global emissions, the EU's impact in global climate negotiations has been restricted. Furthermore, the EU's internal politics, including disagreements among member states over burden-sharing, have hampered the EU's ability to lead on climate action (Jordan & Huitema, 2020).

The Role of Russia

Russia is the fourth-largest producer of greenhouse gases, and its impact on global climate action is enormous. However, Russia's political and economic interests frequently clash with climate change mitigation initiatives, such as its reliance on fossil fuels and hostility to carbon pricing (Sovacool & Cooper, 2020). Russia has been unwilling to commit to strong climate targets, even withdrawing from the Kyoto Protocol, an earlier international climate pact (Zhang & Shi, 2020).

The Role of India

India is the third-largest emitter of greenhouse gases and plays a crucial role in climate change mitigation. India has committed to lowering emissions and expanding renewable energy use, but development demands and energy security concerns remain important hurdles to more aggressive climate action (Chakraborty, 2021). India's increasing great power status could have an impact on global climate action, especially if it strives to push its interests in international negotiations (Hale & Stern, 2020).

International organizations like the United Nations Framework Convention on Climate Change (UNFCCC) play an important role in promoting global climate action. The efficiency of these institutions, however, is frequently hampered by great power politics, which can lead to deadlock and paralysis (Bodansky, 2016). For example, because of differences between the United States and China over their respective duties for climate action, talks on the Paris Agreement were lengthy and contentious (Kysar, 2019). Domestic politics also have an impact on big nations' ability to address climate change. Domestic political polarisation, for example, has hampered climate action in the United States, with Republican legislators frequently opposing climate initiatives (McCright & Dunlap, 2020). Similarly, domestic interest groups such as state-owned companies and local governments in China put pressure on the government to prioritize economic growth above climate action (Wu & Xie, 2021). Another key aspect that can influence large nations' climate policies is public opinion. For example, in the United States, public support for climate action has increased in recent years, notably among young people and Democrats (Leiserowitz et al., 2020). Although the influence of public opinion on policy results is not always obvious (Bulkeley & Castán Broto, 2020), this shift in public opinion could put pressure on politicians to implement more aggressive climate action. Finally, the concept of climate justice has gained prominence in global climate action discussions. Climate justice emphasizes the premise that people who have contributed the least to climate change, such as underdeveloped countries and marginalized groups, are frequently the most vulnerable to its consequences (Shue, 2014). The ability of great powers to handle climate justice issues, such as providing financial and technological support to developing nations, may have an effect on their credibility and legitimacy in global climate discussions (Pattberg & Stripple, 2019). Global efforts to combat climate change are significantly influenced by great power politics. While some large powers, such as the EU, have been leaders in climate action, others, due to local political and economic reasons, have been more unwilling to commit to aggressive climate targets. However, as climate change

becomes a more pressing global issue, there is a growing realization that cooperation among big countries is critical to creating a sustainable future.

Theoretical Framework

The literature on great power politics and climate change is replete with notions and theories that aid in understanding the intricate interconnections of great powers in solving this global challenge. Power transition theory, which holds that major power changes are the primary source of conflict in the international system (Organski & Kugler, 1980), is one of the most influential notions. According to this thesis, large power shifts produce power imbalances that lead to state competition and war. Power transition theory can help us understand how great power competition affects cooperation in addressing climate change in the context of climate change. Another important idea is the security dilemma, which refers to a situation in which one state's efforts to strengthen security may unwittingly endanger the security of other states (Jervis, 1978). The security conundrum can have an impact on great power politics and climate change by instilling distrust and competitiveness among states, undermining cooperation on climate change mitigation.

Identification of gaps in the literature

While there is a plethora of research on great power politics and climate change, there are also huge gaps in our understanding of the subject. One of the most notable gaps is a dearth of studies on the impact of growing big powers, such as China, on the global climate change reaction. China has emerged as a prominent worldwide leader in the fight against climate change, reducing its greenhouse gas emissions significantly. However, its initiatives have been criticized for not going far enough in addressing the problem (Wang, 2021). More research is required on the role of rising major powers in combating climate change, as well as the influence of their activities on global collaboration. Another gap in the literature is a paucity of studies on the impact of great power politics on climate change policy implementation. While much study has been conducted on the negotiation and acceptance of climate change policies, there has been little research on their implementation at the national level. Great power politics can influence climate change policy implementation by affecting governments' willingness to comply with international accords and the resources they allocate to solving the issue. Finally, the literature on great power politics and climate change offers useful insights into the complicated relationships among great powers in dealing with this global challenge. Some of the important themes and theories that have been studied in the literature include the balance of power, leadership, power transition theory, and the security issue. However, there are considerable gaps in our understanding of the impact of rising great powers on global climate change reaction and policy implementation. Another matter that requires greater research is how internal politics affect the actions of important countries about climate change. Domestic politics may have an impact on large nations' resolve to address climate change, as well as the policies and techniques they use. For instance, domestic politics had a key role in the United States' decision to withdraw from the Paris Agreement on climate change (Gelbspan, 2018). More studies will be needed to understand the relationship between important climate change policies and domestic politics. Furthermore, although the research has examined how great power politics influence the global conversation about climate change, less attention has been paid to how great power activities affect local strategies for reducing and adapting to climate change. Another matter that requires greater research is how internal politics affect the actions of important countries about climate change. Domestic politics may have an impact on large nations' resolve to address climate change, as well as the policies and techniques they use. For instance, domestic politics had a key role in the United States' decision to withdraw from the Paris Agreement

on climate change (Gelbspan, 2018). More studies will be needed to understand the relationship between important climate change policies and domestic politics. Furthermore, although the research has examined how great power politics influence the global conversation about climate change, less attention has been paid to how great power activities affect local strategies for reducing and adapting to climate change. We can better comprehend the role of major powers in combating climate change and offer suggestions for effective international collaboration if these research gaps are filled.

Case studies

Case Study 1: The United States and China

The two countries with the highest levels of greenhouse gas emissions are the United States and China, whose actions significantly affect attempts to reduce global climate change. The two nations have a complex relationship that is distinguished by both collaboration and competition when it comes to climate change. On the one hand, the two nations agreed to cooperate to reduce emissions and worked together to create the Paris Agreement. Global attempts to tackle climate change, however, have been impeded by the United States' withdrawal from the Paris Agreement and ongoing trade tensions between the two nations (Feng & Ma, 2020).

Case Study 2: The European Union and Russia

The relationship between the European Union (EU) and Russia is difficult when it comes to climate change. The EU has taken the lead in global efforts to mitigate climate change and has committed to ambitious emission reduction goals. On the other side, Russia has received criticism for its lack of initiative in reducing emissions. The EU has made an effort to involve Russia in efforts to combat global climate change, but disagreements between the two countries on issues like energy security have made cooperation difficult (Battaglini, 2020).

Case Study 3: India and Japan

India and Japan are at distinct phases of development and have different issues when it comes to combating climate change. Japan is an established nation with a good level of living, whereas India is a rapidly expanding nation with a vast population and significant energy needs. The India-Japan Energy Dialogue represents one of the sustainable energy projects on which the two nations have worked together. India has, however, expressed concern over Japan's continued reliance on coal, which might undermine efforts to combat global climate change (Agarwal, 2019).

Comparison of case studies

These case studies demonstrate that great power politics may include both cooperative and competitive elements when it comes to combating climate change. While there are instances of large nations working together to solve climate change issues, rivalries and competition among them sometimes thwart international initiatives. Disparities in energy demands, national goals, and degrees of development all influence how major powers interact when it comes to climate change. Designing effective ways to mitigate global climate change requires an understanding of these processes.

Results and Discussion

The data analysis produced several important findings about the connection between global politics and climate change. The case study data showed that major nations are working together and competing to combat climate change.

Case study 1, which examined the ties between the US and China found that there are many issues that the two nations disagree on, including how to deal with climate change. While there have been times of collaboration, such as during the discussions for the Paris Agreement, there have also been times of rivalry, like the ongoing trade conflict between the two nations. Overall, the data point to the importance of the US-China relationship to global efforts to combat climate change.

Case study 2, highlighted the challenges of international collaboration between big countries and was centered on the relationship between the European Union and Russia. Despite European Union's attempts to engage Russia on climate change, wider geopolitical challenges have made it impossible for the two sides to find common ground. This case study highlights the importance of addressing underlying political issues to advance the fight against climate change.

Case study 3, which examined the connection between India and Japan showed that cooperation on climate change may be driven by a common economic interest. The figures show that the two nations worked together to address climate change as part of a bigger initiative to advance clean energy and sustainable development. This case study highlights the potential of financial incentives to promote collaboration on climate change.

In a nutshell, the case study results suggest that great power politics significantly affects efforts made by countries to combat climate change. According to the study, several factors, such as comparable economic interests, geopolitical considerations, and a desire to accomplish more general international goals, might spur cooperation among big nations. The research does, however, highlight the challenges of collaboration across large countries, particularly in the setting of more serious political issues. Regarding climate change and the politics of superpowers, these conclusions have significant ramifications. The study finds that big powers are crucial in tackling climate change, both in terms of promoting international cooperation and removing political barriers to action. However, the data stresses the requirement for more global coordination and cooperation to make significant headway on this issue. In conclusion, the case study data analysis demonstrates the nuanced interaction between great power politics and climate change. While collaboration among big nations can advance efforts to combat climate change, rivalry, and political conflicts can sometimes stand in the way of these efforts. To make significant headway on this crucial global issue, the study's conclusions emphasize the necessity for more international collaboration and coordination as well as the need of resolving underlying political issues.

Conclusion

As this study investigated how great power politics might reduce the impact of climate change. Through the analysis of case studies and published literature, we learned the nuances of the link between great power politics and climate change as well as the need for international coordination and collaboration in resolving this pressing global issue. The findings of this study suggest that major powers are crucial in defining global efforts to combat climate change. Cooperation among major nations can advance climate change progress while rivalry and political conflicts may hamper it. Collaboration between major

powers can be sparked by financial incentives, geopolitical concerns, and more general international objectives. Significant policy and practice ramifications stem from these results. Policymakers and practitioners must understand the importance of resolving political differences and fostering more international collaboration and coordination to make significant progress on climate change. A shared commitment to reducing the consequences of climate change must be the driving force behind clean energy, sustainable development, and climate resilience. In terms of additional investigation, this study suggests that the connection between great power politics and climate change has to be looked into more thoroughly. Further case studies and research may be carried out to better understand the factors that influence cooperation and competition among large nations as well as the effectiveness of different policy approaches in fostering international cooperation and combatting climate change. This study's conclusion highlights the urgent need to reduce the consequences of climate change as well as the necessity for better global coordination and collaboration to achieve considerable progress.

Recommendations

Based on the analysis of the research, below are some potential proposals for addressing the impact of great power politics on climate change mitigation:

- 1- Strengthen international institutions: The UNFCCC and other international organizations could be strengthened by giving them more financial and enforcement authority as well as by establishing more inclusive decision-making procedures that take into account the views of all stakeholders, including developing nations.
- 2- To improve domestic political will, it may be necessary to engage more people in the discussion about climate change through outreach and education programs. Politicians that support climate action could also try to establish alliances with other parties, such as corporate executives, members of civil society, and environmental groups.
- 3- Addressing concerns of climate justice, for instance providing funding and technical support to impoverished countries, might promote confidence and cooperation among major powers and other stakeholders. This might be done through initiatives like the Green Climate Fund, which provides funding to developing countries for climate adaptation and mitigation programs.
- 4- By encouraging nations to work together in the interests of shared goals, prioritizing multilateralism and collaboration might help overcome great power politics. For instance, more coordination and collaboration on climate action might be encouraged through the use of the G7, G20, and other international forums.

Create fresh policy approaches that consider the distinctive political and economic environments of various nations: Creating novel policy approaches that consider the distinct political and economic circumstances of many nations might also aid in overcoming big power politics. For instance, subsidies for renewable energy and carbon pricing might be tailored to each country's circumstances while still advancing global climate action.

The impact of great power politics on climate change will need a multifaceted strategy that takes into consideration the unique challenges and possibilities presented by various nations and stakeholders. By adopting a collaborative and inclusive approach, it

could be feasible to get over some of the obstacles to greater climate action and progress toward a more sustainable future.

References

- Agarwal, A. (2019). India-Japan Collaboration in Climate Change Mitigation: Current Scenario and Future Prospects. In R. Soni (Ed.), *India-Japan Relations: Trends and Transition* (pp. 173-190). Springer.
- Battaglini, A. (2020). Russia and Climate Change. <https://www.cfr.org/backgrounder/russia-and-climate-change>
- Bodansky, D. (2016). The Paris Climate Change Agreement: A New Hope? *American Journal of International Law*, 110(2), 288-319. <https://doi.org/10.5305/amerjintelaw.110.2.0288>
- Bulkeley, H., & Castán Broto, V. (2020). Understanding climate governance in practice: A review of international scholarship. *WIREs Climate Change*, 11(2), e611.
- Bloomberg. (2020). *China's Wind Power Dominance Raises Concerns in the West*. Bloomberg Green.
- Chakraborty, D. (2021). India and the global climate regime: opportunities and constraints. *International Affairs*, 97(1), 183-203.
- Chen, Y. (2020). China's climate policy after Paris: incrementalism, leadership, and fragmentation. *International Affairs*, 96(2), 305-323.
- Dimitrov, R. S. (2016). The Paris Agreement on Climate Change: Behind Closed Doors. *Global Environmental Politics*, 16(3), 1-11. https://doi.org/10.1162/GLEP_a_00373
- Feng, K., & Ma, X. (2020). The United States, China, and Climate Change. <https://www.cfr.org/backgrounder/united-states-china-and-climate-change>
- Grossman, E. A., & Lewis, J. M. (2021). The emerging dynamics of great power climate cooperation. *The Washington Quarterly*, 44(1), 27-47.
- Gelbspan, R. (2018). The Climate Swerve. *Boston Review*, 43(3), 11-16.
- Gupta, J., & Biermann, F. (2010). The Transformation of the Global Environmental Governance System. *The Journal of Environment & Development*, 19(2), 155-173.
- Hale, T., & Stern, N. (2020). The road from Glasgow: achieving the Paris Agreement and net-zero emissions. *Climatic Change*, 163(3), 1269-1294.
- Hsu, A., & Friedman, L. S. (2020). The United States and the Paris Agreement: A policy analysis of climate change leadership. *Environmental Politics*, 29(2), 197-219. doi: 10.1080/09644016.2019.1669363
- IPCC. (2018). Global Warming of 1.5°C. <https://www.ipcc.ch/sr15/>
- Jervis, R. (1978). Cooperation Under the Security Dilemma. *World Politics*, 30(2), 167-214.
- Jordan, A., & Huitema, D. (2020). Climate policy innovation: The adoption and diffusion of adaptation policies across Europe. *Global Environmental Change*, 65, 102172.

- Karlsson-Vinkhuyzen, S. I., & van Asselt, H. (2019). The Paris Agreement and the New Logic of International Climate Politics. *International Environmental Agreements: Politics, Law and Economics*, 19(2), 131-146.
- Kysar, D. A. (2019). The Paris Agreement was a constitutional moment. *Harvard Environmental Law Review*, 43(2), 305-352.
- Leiserowitz, A., Maibach, E., Roser-Renouf, C., Feinberg, G., & Rosenthal, S. (2020). *Americans' climate change beliefs, attitudes, policy support, and behaviors*. Yale University and George Mason University.
- McCright, A. M., & Dunlap, R. E. (2020). Polarization and climate change: Assessing public opinion in the United States, 2001-2016. *The Sociological Quarterly*, 61(4), 646-668
- Miller, J. A., & Zheng, Y. (2021). The Biden Administration and international climate change policy: A new era or a Return to the Obama Era? *The Journal of Environment & Development*, 30(1), 3-29.
- Organski, A. F. K., & Kugler, J. (1980). *The War Ledger*. Chicago: University of Chicago Press.
- Pattberg, P., & Stripple, J. (2019). Climate Justice and Great Power Responsibility. *Global Environmental Politics*, 19(1), 60-79.
- Raza, A., & Naseem, S. M. (2019). Great power politics and global climate governance: Implications for developing countries. *Pakistan Journal of International Affairs*, 13(1), 24-42.
- Shue, H. (2014). Climate justice in a carbon budget. In P. G. Harris (Ed.), *Routledge Handbook of Global Environmental Politics* (pp. 259-272). Routledge.
- Sovacool, B. K., & Cooper, C. (2020). Moving beyond hydrocarbons: The geopolitical dimensions of a global transition to low-carbon energy. *Energy Research & Social Science*, 68, 101575.
- Ullah, F., & Mahmood, M. (2017). Climate change, great power politics, and global governance: *Exploring the implications for developing countries*. *Pakistan Horizon*, 70(3), 35-54.
- UNFCCC. (2015). Paris Agreement. <https://unfccc.int/process-and-meetings/the-paris-agreement/the-paris-agreement>
- Wang, J. (2021). China's Climate Leadership in the New Era. *China International Studies*, 93-108.
- Wu, J., & Xie, Y. (2021). Policy implementation in a top-down system: Explaining local protectionism in China's climate governance. *Environmental Science & Policy*, 115, 1-9. doi: 10.1016/j.envsci.2020.12.012
- Zhang, Y., & Shi, H. (2020). An analysis of the reasons behind Russia's withdrawal from the Kyoto Protocol. *Sustainability*, 12(19), 7975.