Environment, Social and Governance; Vol.2, No.5; 2025
E-ISSN: 3006-3973 P-ISSN：3006-3965
DOI: https://doi.org/10.70267/ esg2025.v2n5.3240
Published by: Zeus Press

Group Gaming in the Predicament of Action Implementation: The Procrastination Logic of Emerging Nations in Global Climate Governance

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Abstract

This article focuses on the dilemma of action implementation in global climate governance and explores the group game logic behind emerging countries' procrastination. Within the existing climate governance system and uneven interest distribution pattern, emerging countries are trapped in the dual pressures of pursuing economic development and fulfilling emission reduction commitments. The game with developed countries and other interest groups over rights and obligations is a key factor in their decision-making. The study reveals how group interest games shape emerging countries' procrastination strategies, aiming to provide practical insights for resolving the collective action dilemma in global climate governance and optimizing the international governance mechanism.

Keywords

global climate governance, procrastinating behavior, collective action

1. Introduction

1.1 Research Background and Problem Setting

Global climate governance now faces a paradoxical impasse: consensus-building agreements are readily reached, yet concrete actions remain conspicuously delayed. A prime example is the COP28 resolutions, whose implementation has persistently trapped in a cycle of protracted delays. This predicament fundamentally reflects the intense power struggles in international politics. Climate governance inherently constitutes a battleground for global public goods provision and national interest distribution, where negotiations have evolved into arenas of bloc coordination. The North-South divide, energy interest fragmentation, and stark disparities in demands have transformed protracted delays from individual nations' choices into coordinated group actions (Paddison, 2025).

Therefore, this paper focuses on exploring: what interests of emerging countries form a unified position? And what ultimately leads to the delay of action and the difficulty of implementing governance strategies?

1.2 Literature Review

Current research on climate governance exhibits three fundamental limitations. First, explanations for delayed climate governance predominantly focus on individual major powers, with insufficient exploration of

collective actions among national groups. Second, studies on national groups fail to adequately integrate the public good attributes of climate governance, making it challenging to identify the root causes of delayed action. Third, the integration of public goods theory with collective action remains underdeveloped, lacking a systematic analytical framework.

Existing research interprets climate governance delays through three perspectives: First, the great power power game perspective, which attributes the core causes of delays to interest divergences and power balances among major powers like China, the US, and Europe, yet overlooks the impact of coordinated actions by small and medium-sized countries (Wang, 2018). Second, the institutional deficiency perspective identifies decision-making, accountability, and oversight issues in relevant conventions and mechanisms that delay implementation, while insufficiently exploring the underlying group interest dynamics (Zhang, 2015). Third, the interest heterogeneity perspective argues that fragmented demands caused by differences in national development, energy, and vulnerability prevent unified action, resulting in climate governance remaining on paper without analyzing how countries transform interests into influence through group collaboration (Li, 2021).

Research on nation groups primarily focuses on "interest convergence." Olson's "collective action logic" explains the dilemma of small group formation and the "free-rider" phenomenon in collective action: larger groups tend to have members who prefer to enjoy collective benefits without contributing costs. However, this theory has limitations—it struggles to account for position convergence achieved by large groups in developing countries through "shared identity" and "consensus on priority issues" (Olson, 2012). In negotiation strategies, nation groups influence the final formation of unified standards through "agenda-setting," "joint proposals," and "collective veto," thereby causing repeated delays in action. Existing research, however, overlooks the public good nature of climate governance and its strategic connections with governance action delays (Liu and Zhao, 2019).

Clearly, most existing studies have not taken 'state groups' as the core analytical subject to explain the lack of collective action among them. This research focuses on group games and uses the fossil fuel transition case from COP28 to clarify the logic behind the delay trap.

1.3 Research Significance

Theoretically, this paper breaks the analytical mold of "great power centrism" by taking national groups as the starting point. By comparing the logic of collective action among groups with the logic of individual power of great powers, it deepens the understanding of the mechanism behind the procrastination dilemma in global climate governance actions and provides new insights for solving the collective action challenges in global public governance. Practically, the paper attempts to identify the interest demands and procrastination tactics of various national groups, aiming to help emerging economies like China formulate more precise negotiation strategies and promote the implementation of governance.

2. Methodology

2.1 Research Design

This study employs qualitative research methods, primarily utilizing case analysis, with group game theory and global public goods theory as dual theoretical foundations. It first constructs an analytical logic chain of "interest convergence—action delay" to clarify the core dimensions of emerging country blocs 'interests and the dimensions of their delayed actions. Through an in-depth analysis of the COP28 fossil fuel transition negotiations, the study systematically dissects group interactions, position articulation, and action milestones during the agreement implementation process. This verification of the complete formation mechanism—"interest divergence converging into collective positions—collective positions transforming into delay strategies—delay strategies leading to governance inefficiency" —effectively demonstrates the formation mechanism of emerging country blocs' delay behaviors in climate governance.

2.2 Research Approach

The research methodology follows a progressive framework of "theoretical construction—data collection—empirical analysis—conclusion expansion": This paper first systematically reviews theoretical literature in global climate governance, bloc dynamics, and public goods/collective action to establish a theoretical foundation. It then focuses on the fossil fuel transition agenda at COP28, collecting joint statements, public declarations, and UNFCCC negotiation records from emerging blocs based on relevance, authority, and clarity. By categorizing stakeholders into "emerging blocs—developed blocs—specific interest groups," the study extracts actionable core statements and identifies specific delaying tactics (e.g., collective veto, conditional proposals, phased implementation demands). Through comparative analysis of interest foundations and action logics across these groups, it clarifies causal relationships between delaying strategies and negotiation outcomes. Subsequently, the paper contrasts developed blocs and specific interest groups to dissect emerging blocs 'position formation processes, joint action strategies (e.g., collective veto, proposal amendments), and their causal links to delayed implementation. Finally, it summarizes key elements of emerging blocs' delaying logic, evaluates theoretical contributions from existing research, and proposes optimization directions aligned with climate governance practices.

2.3 Data Sources

The data of this study is verified by multiple sources, mainly official text, supplemented by authoritative reports and statistical data, to ensure the authenticity, pertinence, and comprehensiveness of the data.

This article primarily draws on the UNFCCC's official COP28 negotiation report, relevant draft resolutions and revised versions, the joint statement and proposal documents of the Group of 77 and China, as well as the climate negotiation position documents of representative emerging countries such as India and Brazil. It filters out procedural documents unrelated to core issues, selecting those that "directly involve the setting of targets, implementation paths, and responsibility allocation for fossil fuel transition" and "include clear interest claims and action propositions at the group or national level." The article also selects panel data from 2018 to 2023, citing energy structure statistics of emerging countries released by the International Energy Agency (IEA) and carbon emission accounting data from the World Resources Institute (WRI). The main data covers major emerging countries to provide objective data support for interest claim analysis. Additionally, the article selects reports containing details of the negotiation process, insider group interactions, and focal points of position disputes, primarily authoritative reports such as in-depth coverage of COP28 negotiations by international mainstream media like Reuters and AFP, to supplement dynamic information not covered by official texts and enhance the completeness of the analysis.

2.4 Case Selection and Justification

The core case of this study is selected from the COP28 fossil fuel transition negotiations to analyze the game behavior of emerging country groups, which is both typical, explanatory, and feasible.

The primary considerations are threefold. First, this case serves as a paradigmatic example of governance action delays. COP28 marked the first time "fossil fuel transition" was explicitly mentioned in a resolution, breaking the previous ambiguous treatment of this core issue in negotiations. Emerging nations delayed the transition process through collective advocacy, joint proposal amendments, and vetoing radical clauses, demonstrating a complete chain of "position articulation—strategic implementation—result presentation" in their delaying behavior, making it a typical case of bloc-level delays in global climate governance. Second, the case encompasses core contradictions in global climate governance such as "development rights versus emission reduction responsibilities," "short-term economic interests versus long-term environmental benefits," and "North-South power dynamics." The delaying logic of emerging nations essentially reflects the dilemma of coordinating developing countries' interests in global public goods provision, which can be extended to explain other climate-related bloc actions like carbon tariffs and climate finance, demonstrating universal explanatory significance. Finally, COP28 was held in 2023, with relatively recent documentation. Official UNFCCC documents, bloc joint statements, and in-depth media reports from the event are well-preserved and easily accessible, ensuring the richness of case analysis details and the solidity of arguments (Geng et al., 2025).

2.5 Analysis Framework

Based on the logic of action sequence, this study constructs a three-dimensional analysis framework to analyze the delay logic of emerging country groups from the three levels of premise, means, and results.

Emerging nations' strategic delay mechanism is rooted in their shared interests, including prioritizing development rights, securing financial and technical support, and restructuring energy systems. This analysis examines how these interests coalesce into a unified bloc stance. The delay tactics—such as collective veto power, agenda bundling, and issuing vague statements to sidestep commitments—reveal how these strategies directly hinder implementation. Ultimately, the delayed actions paradoxically strengthen internal cohesion, creating a closed loop from interest-driven delays to further delays, making it difficult to translate global climate governance consensus into concrete actions.

3. Division of National Groups and Interests in Global Climate Governance

In global climate negotiations, nation groups are not random loose alliances but stable collectives formed by shared interests, with their divisions closely tied to three key factors: development stage, energy, and geographical environment. This study focuses on three core groups, analyzing emerging countries 'delaying tactics by examining the demands of various parties on the' fossil fuel transition' agenda at COP28.

3.1 Group of Developed Countries (Represented by G7)

The member countries include the United States, EU member states, Japan, Canada, and others. These nations share similar historical emission responsibilities, comparable economic development levels, and lead in low-carbon technologies, giving them competitive advantages in new energy sectors. On one hand, they are pushing for strict global emission reduction rules to capture international market shares in low-carbon technologies. On the other hand, they are actively undermining the principle of common but differentiated responsibilities by demanding greater emission reduction commitments from emerging economies while delaying obligations related to climate finance and technology transfer.

3.2 Emerging Economies Group (Represented by BASIC)

The members include China, India, Brazil, and South Africa. These countries are all in the mid-to-late stages of industrialization, with high dependence on energy for economic growth. At the same time, as "representatives of developing countries," they stand united on the principle of common but differentiated responsibilities, opposing developed countries' attempts to shift the cost of emission reduction. Regarding their own emission reduction targets, they advocate for nationally determined contributions and oppose mandatory emission reduction timetables set by developed countries to avoid hindering economic development.

3.3 Specific Interest Group

3.3.1 OPEC (Organization of the Petroleum Exporting Countries)

They are composed of energy exporters such as Saudi Arabia, Russia, and Iran. Their economies are highly dependent on fossil energy exports, and the tightening of global emission reduction rules directly threatens their core economic interests.

Therefore, this group of countries firmly opposes including "fossil fuel production limits" in the global climate treaty, arguing that emission reductions should come from technological innovation rather than restricting energy supply. In climate negotiations, they often collaborate with other high-emission countries to delay rule-making by emphasizing the high costs of transition and questioning scientific data, thereby maintaining the existing energy economic model.

3.3.2 The Group of Vulnerable States (Represented by AOSIS)

Small island states and least developed countries, such as the Maldives, Fiji, and Barbados, are mainly characterized by a fragile geographical environment, especially the direct threat of sea level rise to territorial

security, and a weak economic foundation. They are the biggest victims of the climate crisis and have the strongest awareness of the urgency of the governance process.

At the conference, they insisted on keeping global warming below 1.5°C, demanding developed nations shoulder their "historical emissions responsibility" and establish a fund to compensate for climate-related losses. They opposed any form of negotiation delays, often pushing for consensus through joint statements. However, their limited economic and political influence made it difficult to single-handedly alter the negotiation trajectory (Geng et al., 2025).

4. The Collective Action Strategy of the Emerging Countries and the Formation of the Delay Dilemma

The implementation dilemma of the action of emerging countries group is the result of "internal capacity constraint" and "external force obstruction" jointly.

4.1 Constraints in Action within the Emerging Countries Group: A Case Study of BASIC and AOSIS

The core challenge in emerging economies' action dilemma lies in the mismatch between costs and capabilities. Balancing economic growth with emission reduction efforts requires these nations to bear the direct costs of transformation while reaping global benefits like climate improvement that come with delayed effects. Compounding this issue is the absence of effective internal interest coordination mechanisms, which makes it difficult to achieve consensus at the implementation level. This creates a "collective action paradox" that perpetuates delays in action.

4.1.1 Disagreement on Decisions within the Group of Emerging Countries

As the core force of the emerging countries group, the BASIC countries are highly consistent in opposing the transfer of responsibilities from developed nations, yet they exhibit significant differences in the specific implementation paths for fossil fuel transition, directly undermining the efficiency of collective action. For instance, during the post-COP28 implementation plan negotiations, China advocated "formulating a phased transition roadmap based on the energy structure differences of various countries, advancing the replacement of renewable energy and the clean utilization of fossil fuels simultaneously," and has already initiated domestic coal power upgrade projects; India, however, due to its domestic electricity supply relying on coal for over 70%, insisted that "developed countries must first provide sufficient transition funds and technology transfer before formulating specific implementation timetables," refusing to set clear fossil fuel reduction targets (IISD, 2024); Brazil and South Africa fall somewhere in between, hoping for external support while attempting to accelerate their own renewable energy deployment. These internal disagreements make it difficult for the BASIC countries to form a unified and effective action plan, failing to effectively counter the delaying strategies of external forces. Ultimately, the emerging countries group can only reach consensus on the principle of "opposing mandatory emission reductions," lacking clear agreements on key implementation aspects such as transition progress, fund allocation, and technology sharing, plunging the transition action into a state of "consensus without plan."

The core of internal procrastination lies in the heterogeneity of interests and the absence of coordination mechanisms. While all emerging economies are developing nations, they differ in energy structures, economic strength, and development stages. The uneven distribution of transition costs and benefits makes it difficult to align implementation demands. Moreover, the lack of a regularized interest coordination platform prevents effective negotiation to resolve disagreements, often resulting in fragmented discussions. This ultimately creates a "collective irrationality caused by individual rationality" dilemma, where fragmented efforts lead to collective inaction.

4.1.2 Emerging Countries Are Weak and Their Actions Are Unsustainable

The passive delays by vulnerable groups like AOSIS reflect an imbalance between power and demands, making it impossible to compel developed nations to fulfill their financial and technical support obligations. Moreover, the global climate governance system lacks mechanisms to bolster the 'implementation capacity of

vulnerable countries,' leaving them with 'claims but no means' —an indirect catalyst for the overall delay in global transition efforts.

While occupying the "moral high ground," vulnerable countries with limited political and economic influence have demonstrated particularly pronounced shortcomings in implementation capacity. At COP28, AOSIS and LDCS jointly released the Current Status Report on Climate Refugees and disclosed disaster loss data to spark international attention regarding fossil fuel transition urgency. Post-conference, the Vulnerable Countries and Emerging Countries jointly published the "Climate Disaster Loss Report," successfully advancing the establishment of the "Loss and Damage Fund." However, emerging countries 'substantial funding gaps for domestic transition make it difficult to provide substantial support to vulnerable nations, resulting in the Fund's scale being far below actual needs. Moreover, emerging countries' reliance on imported low-carbon technologies and lack of independent innovation capabilities hinder their ability to assist vulnerable nations in building renewable energy systems through technology transfer, impeding coordinated transition efforts. Additionally, administrative inefficiencies and inadequate data monitoring within emerging countries have caused their Nationally Determined Contributions (NDCs) to lag behind pledged timelines. The fundamental flaw in implementation capacity stems from a mismatch between development stages and governance requirements. Emerging economies, still in the industrialization process, must prioritize economic growth over climate transition funding and workforce development. Meanwhile, developed nations that should lead the charge are shirking their responsibilities. Furthermore, incomplete low-carbon technologies hinder rapid transition away from traditional energy sources, while flaws in global technology transfer mechanisms further limit capacity building. This creates a persistent disconnect between consensus-building and concrete action implementation (International Energy Agency, 2025).

Meanwhile, regarding the critical issue of "the scale and sources of transition funds," the lack of bargaining power in negotiations with developed countries, coupled with the heavy reliance on voluntary donations from developed nations, has prevented the establishment of a mandatory funding mechanism. As historical major emitters, developed countries with advanced technologies and strong economic power bear inescapable responsibilities for emission reduction. They should have proactively assisted emerging nations in development and emission reduction. However, these developed powers have repeatedly delayed commitments, refusing to make clear pledges or take concrete actions. Ultimately, they found themselves in a dilemma where they couldn't force compliance, forcing AOSIS to halt its energy transition efforts. While this superficial progress avoided a complete consensus breakdown, it essentially remained a form of procrastination. Developed countries temporarily eased international public pressure through symbolic verbal commitments, yet delayed substantive action implementation (Paddison, 2025).

4.2 External Forces Hindering the Group of Emerging Economies' Actions: A Case Study of OPEC and Selected Developed Countries

4.2.1 Strong Dependence on Traditional Energy Makes It Difficult to Give up

The Organization of the Petroleum Exporting Countries (OPEC)'s prolonged delays stem from a fundamental clash between vested interests and governance objectives. Its economic interests are irreconcilably at odds with the fossil fuel transition, while global climate governance lacks compensation mechanisms for "transition-affected nations," enabling collective obstruction of implementation. Moreover, the "consensus-based" decision-making framework grants veto power to a minority of countries, further amplifying their ability to block progress and trapping the transition process in a prolonged stalemate.

To protect fossil fuel interests, OPEC member states adopted a "collective veto + strategic alignment" approach by jointly issuing a statement opposing the inclusion of the "20% oil production cut by 2030" clause in the convention. They argued that this provision "ignores energy security and developing countries 'needs," directly hindering the implementation of transition initiatives by emerging nations. During post-COP28 implementation negotiations, OPEC allied with Russia, Australia, and other countries, using consensus decision-making as leverage to explicitly reject the "15% fossil fuel production cut by 2035" clause, claiming it would "seriously undermine developing countries' energy security." This "collective veto threat" has stalled breakthroughs in critical energy transition disagreements, leaving the "fossil fuel transition timeline" issue unresolved for years (IISD, 2024). Meanwhile, OPEC exploited emerging countries 'partial dependence on

energy exports (e.g., India's reliance on Middle Eastern oil imports) by using "stable energy supply" as leverage to pressure these nations into abandoning strict transition implementation rules. Additionally, OPEC funded think tanks to publish "overestimated transition costs reports," questioning the feasibility of fossil fuel alternatives and misleading international public opinion to create resistance for emerging countries' transition efforts. These actions have directly hindered emerging nations from establishing robust international transition frameworks, while their domestic transition efforts face growing challenges due to uncertainties in external energy markets.

The core obstacles to OPEC's efforts stem from conflicting interests and power dynamics. Its economic foundation fundamentally clashes with the transformation goals of emerging economies. The bargaining power derived from energy trade makes it difficult for these nations to unilaterally drive their transition. Moreover, the global climate governance framework lacks effective penalties for such obstructionist practices. This allows OPEC to collectively block transition pathways, creating persistent barriers to the energy modernization initiatives pursued by developing countries.

4.2.2 Transfer and Evasion of Emission Responsibilities of Developed Countries

The root cause of developed nations' protracted delays lies in the mismatch between accountability mechanisms and profit incentives. Their competitive edge in low-carbon technologies drives them to seek profits through policy-making rather than bearing the costs of substantive transformation. Moreover, the absence of enforceable oversight mechanisms for historical responsibilities creates a loophole where procedural compliance can mask inaction, establishing a long-term institutional space for such delays.

As pivotal actors wielding substantial influence and clout, certain developed nations have not only failed to spearhead energy transition initiatives but have instead exploited their economic dominance and political leverage. Through strategic interest swaps and procedural manipulations, they shift emission reduction responsibilities onto emerging economies, thereby obstructing their transition efforts. Regarding transition costs, while the United States pledged additional climate funding, it imposed conditions such as "prioritizing low-carbon projects in U.S. partnerships" and "opening new energy markets," effectively transforming public funds into tools for technological exports and market expansion. This has inflated the actual transition funds available to emerging countries. In terms of implementation oversight, the U.S. and EU jointly promoted the Carbon Border Adjustment Mechanism (CBAM), requiring emerging nations to submit detailed carbon footprint reports for exported goods. By increasing trade costs, they pressured these countries to accelerate transitions without providing corresponding technical or financial support. This strategy shifts the focus from developed nations 'financial obligations to emerging economies' responsibilities, essentially transferring their own emission reduction responsibilities onto developing countries. Major powers still fail to fulfill their historical emission obligations (Bai, 2024). Furthermore, developed nations have delayed critical issues like "accounting for historical emission responsibilities" and "climate funding disbursement timelines," further diverting resources and attention from emerging countries' transition efforts. By exploiting the power imbalance in global governance, developed nations employ the tactic of responsibility shifting to impose their preferred implementation rules, thereby transferring transition costs onto emerging economies. Meanwhile, the "common but differentiated responsibilities" principle lacks clear enforcement standards and oversight mechanisms. This allows developed countries to dilute their obligations through ambiguous responsibility boundaries and unreasonable conditions, exacerbating the burden on developing nations. Ultimately, this results in delayed transition efforts by emerging countries due to insufficient resources and overwhelming pressure (Zhang, 2020).

5. Conclusion

5.1 Conclusions of the Study

The protracted challenges in global climate governance are not isolated actions by individual nations, but rather the outcome of intergroup negotiations and the balancing of interests and costs. The persistence of delays stems not only from internal power struggles and divergent views, but also from external entanglements: lingering dependence on traditional energy sources, conflicting decision-making within coalitions, concerns over economic stability and domestic environmental conditions, and developed nations' attempts to evade

historical emission responsibilities... These multidimensional obstacles in climate governance have created a web of intertwined interests that perpetuate delays. Therefore, achieving effective global climate governance is not an overnight task. It requires collective wisdom and coordinated efforts to balance competing interests, which is the only way to find solutions.

5.2 Research Limitations and Prospects

This study focuses on four core national group types, though not covering all group categories. Future research could expand the scope to analyze their impact on governance processes. While primarily employing qualitative analysis, the study could utilize quantitative methods (e.g., statistical analysis of group proposal approval rates) to more precisely measure the influence of group actions on the protracted dilemma.

Through this study, it is not difficult to see that global climate governance is not an impossible path, and there is still a possibility and hope for solutions. The conclusions of this study can provide references for emerging country groups to participate in climate negotiations. Taking China as an example: as a core member of the BASIC countries, China needs to promote interest coordination within the group, such as providing funds for coal-to-electricity transition through the New Development Bank of BRICS, alleviating cost concerns in India and South Africa, resolving internal group disputes, and strengthening collective action capabilities; at the same time, it can collaborate with vulnerable countries like AOSIS, linking issues such as tying climate funds to low-carbon technology transfers, to counter the delaying strategies of developed countries and push global climate governance from delay to action.

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Funding

This research received no external funding.

Conflicts of Interest

The authors declare no conflict of interest.

Acknowledgment

This paper is an output of the science project.