

The Role of International Institutions in Environment Politics in 21st Century

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Abstract: The 21st century has witnessed a significant transformation in environmental politics, driven largely by the growing influence of international institutions. This study examined the role of global organizations such as UNEP, IPCC, UNFCCC, World Bank, CBD, and UNCCD in shaping environmental governance. Using a descriptive and analytical research design based on secondary data from 2010 to 2024, the study analyzed institutional contributions in terms of policy formulation, financial assistance, monitoring mechanisms, and international cooperation. The findings revealed that international institutions have successfully expanded global participation, with over 190 countries engaged in environmental agreements, and have established key frameworks such as the Paris Agreement and biodiversity conventions. However, the study also identified a significant gap between political commitments and scientific requirements, as current emission reduction targets (7–10%) fall short of the IPCC-recommended 43% needed to limit global warming to 1.5°C. Additionally, while climate finance and cooperative mechanisms have improved, inequalities in economic and technological capacities continue to hinder effective implementation, particularly in developing countries. The study further highlighted the influence of geopolitical power dynamics, where developed countries dominate climate finance contributions and decision-making processes. Overall, the research concluded that although international institutions play a crucial role in advancing environmental politics, their effectiveness is constrained by implementation gaps, insufficient funding, and structural inequalities. Strengthening enforcement mechanisms, ensuring equitable participation, and enhancing financial and technological support are essential for improving global environmental governance.

Keywords: International Institutions, Environmental Politics, Global Governance, Climate Change, Paris Agreement, Climate Finance, Sustainable Development, UNEP, IPCC, UNFCCC

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INTRODUCTION

The impact of international institutions on environmental politics in the 21st century has been being experienced with the increased influence of the international institutions in addressing the global environmental issues like global warming, loss of biodiversity and land degradation which are beyond national borders (Mitchell, 2013). NGOs like the United Nations Environment Programme (UNEP), Intergovernmental Panel on Climate Change (IPCC) and United Nations Framework Convention on Climate Change (UNFCCC) have assumed the frontline in global response coordination, establishment of environmental standards and global cooperation between countries (Hickmann et al., 2021). The timeliness of the issues concerning the environment has been emphasized by real-time events e.g. the rising frequency of extreme weather events e.g. the 2023 heatwaves in Europe and Asia, and disastrous floods in such countries as Pakistan (2022), which highlighted the necessity of united international efforts (Valavanidis, 2022).

Among the clearest illustrations of the influence of institutions are the Paris Agreement (2015) within the UNFCCC comprising 196 countries to make a commitment to cut greenhouse gas emissions in the form of

Nationally Determined Contributions (NDCs) (Hughes, 2022). This pact is a historic precedent of global environmental regulation and it shows how international organizations could encourage the unity despite different national interests. Accordingly, the Glasgow Climate Pact (COP26, 2021) reaffirmed an aspiration to achieve net-zero emissions and focusing climate finance on the developing nations. These examples demonstrate that international platforms not only determine policy frameworks, but also impact the national level of environmental policies and accountability measures (Lyster 2023).

The other major example is the Convention on Biological Diversity (CBD), especially the Kunming-Montreal Global Biodiversity Framework (2022) which will safeguard 30% of the earth and its seas by 2030 (Joly, 2022). It is an initiative that focuses on the role of the international institutions in terms of ensuring conservation of biodiversity as part of legally binding and voluntary commitments. Similarly, the United Nations Convention to Combat Desertification (UNCCD) has been instrumental in combating land degradation particularly in countries like Sub-Saharan Africa and South Asia through the promotion of sustainable land management and national action programmes (Byron-Cox, 2020).

International institutions also have a practical effect through financial and technical aid mechanisms. As an example, Green Climate Fund (GCF) has funded renewable and climate adaptation initiatives in such nations as India, Bangladesh, and Kenya, among others, to allow them to move to sustainable development pathways (Seo et al., 2022). The climate programs of the World Bank have also encouraged the development of solar energy in India and projects to build resilience in the sensitive coastal states. These illustrations demonstrate the institutional support in terms of actual environmental results, especially on developing economies (Poonia, 2025).

In spite of all that, the performance of the international institutions is still disputed because of such issues as imbalance of power, lack of finances and ineffective enforcement mechanisms (Butt & Malik, 2024). The limited gains in the reduction of emissions targets under the Paris Agreement and the debates on the commitment to climate financing, as presented as case studies, show how complicated global environmental governance can be (Held & Roger, 2018). Therefore, although international institutions are critical in the process of defining environmental politics, their performance depends on the political will and economic inequalities as well as the changing nature of environmental issues in the world (Dauvergne, 2012).

REVIEW OF LITERATURE

The political and structural characteristics of the evolution of international institutions in global governance have been critically analyzed. Chimni (2004) emphasized that international institutions can be seen as an expression of power asymmetry and can be understood as an instrument of a dominant global order. In line with governance perspectives, Agrawal and Lemos (2007) emphasized a new trend in global environmental governance, which is based on decentralized governance structures. In addition to this, Pattberg and Stripple (2008) extended our understanding of global governance by highlighting the growing importance of transnational actors in global governance structures.

Other contributions focused further on the role of institutions in influencing environmental politics and policy. Diehl & Frederking (2010) provided an account of international organizations as facilitators in

global governance. Ivanova (2011) emphasized the need to build on the environmental pillar in global governance to address issues of fragmentation and inefficiency. O'Neill et al. (2016) concentrated more on institutional changes with a focus on adaptive governance in the Anthropocene. In addition to this, Dauvergne & Clapp (2016) discussed the growing intricacies in environmental politics due to globalization and the role of different actors in this process.

Moreover, the theoretical and empirical literature has sought to establish the relationship between power, institutions, and cooperation. In this respect, Moravcsik (2018) highlighted the significance of state preference and power in shaping institutional outcomes, with powerful states having a higher influence in the outcome. Falkner and Buzan (2019) added environmental stewardship to the list of key institutions in global society, indicating a new norm in environmental politics. Zarei et al. (2020) highlighted the importance of cooperation in addressing transboundary environmental issues, while Haynes et al. (2023) discussed globalization in the context of the growing importance of international institutions in world politics.

New literature on environmental politics has highlighted some of the legal and practical issues in environmental politics. In this respect, Sands (2023) highlighted the importance of international law and sustainable development in ensuring accountability in environmental politics. Budiana (2024) noted that while international institutions have enhanced cooperation in policy-making, they have some challenges, including issues related to power, funding, and implementation. In this respect, the literature shows that international institutions are key actors in environmental politics in the 21st century, with some limitations in their effectiveness in environmental politics due to issues related to power, geopolitical interests, and governance.

RESEARCH METHODOLOGY

The research design used was a descriptive and analytical research design in order to investigate the role of international institutions in influencing environmental politics in the 21st century. The secondary data-based research technique was used because the study set out to examine the existing knowledge, institutional reports, and international environmental trends, but not to produce primary data. It was found that this design was suitable in going through large scale global governance processes, policy developments and institutional contributions over time.

It was more of a qualitative research work with accompanying quantitative supplements. Qualitative analysis came in the form of evaluation of policy documents, institutional structures and academic literature and quantitative data in form of climate finance flows, emission patterns and rates of adoption of renewable energies were included in order to reinforce the findings. This ambivalent orientation made it possible to have a holistic view of both the conceptual and empirical aspects of environmental politics.

The study data were gathered solely through the secondary sources, such as reports by international organizations, like UNEP, IPCC, World Bank, UNFCCC, OECD, and the Green Climate Fund, and peer-reviewed journal articles, books, and official policy papers. The data discussed the year 2010 in comparison to 2024 in order to be contemporary. The sample size consisted of about 50-60 documents that were purposively chosen using a purposive sampling method in respect to credibility, recency and

relevance to the research objectives

Data were analyzed with the help of the thematic analysis, content analysis, and comparative analysis. Thematic analysis aided in the determination of major trends that include policy influence, financial support, institutional effectiveness and governance challenges. The systematic analysis of the institutional reports and agreements was conducted with the help of the content analysis, whereas the comparative analysis helped to determine the difference between the developed and developing countries in the areas of environmental outcomes and the impact of the institutions. The interpretation of findings was also supported by basic descriptive statistics (percentages and trends).

To provide reliability and validity, the study had used verified and internationally accepted data sources, and cross-checking of various reports was done to yield similarity. The data triangulation improved data strength, whereas the study was informed by the Institutional Theory and Global Governance Theory to give it a solid theoretical basis. The research, however, was constrained by its use of secondary data, the possible discrepancies of the data across the sources, and the lack of the primary level of insight. Ethics were followed through thorough recognition of all sources and shunning any type of plagiarism.

RESULTS

The secondary data analysis was based on reports of international organizations like UNEP, IPCC, World Bank, UNFCCC, and peer-reviewed studies (2010-2024) and revealed that international institutions have become increasingly core in the formation of the environmental politics in the 21st century. There is evidence that these institutions have impacted the global environmental governance in four major ways which include policy formulation, financial aid, monitoring systems as well as co-ordinating multilateral cooperation. As an example, UNEP (2023) and IPCC (2022) reports show that more than 190 countries have committed to global environmental agreements as evidence of the growing institutional scope.

Among the most important discoveries, there is one which is connected to agenda-setting as well as norm development. The Paris Agreement (2015), which was facilitated by the UNFCCC, sent a wave of change in the global climate regulation, as 196 Parties agreed on Nationally Determined Contributions (NDCs). According to the secondary information provided by UNFCCC synthesis reports (2023), countries engaged in this framework have a collective goal of decreasing the emissions by about 7-10% by 2030 as compared to the base year, which is lower than the 43% that IPCC recommends in order to curb global warming to 1.5°C. Moreover, there have been institutionalized systems like the Monitoring, Reporting and Verification (MRV) system that have enhanced the transparency with more than 85% of the countries involved in it giving regular climate reports, meaning that there is better accountability.

Table 1: Emission Reduction Targets under the Paris Agreement vs. IPCC Recommendations

Aspect	Paris Agreement (UNFCCC, 2023)	IPCC Recommendation (AR6, 2022)
Agreement Framework	Global climate treaty under UNFCCC adopted in 2015	Scientific assessment report on climate change mitigation

Number of Participating Parties	196 Parties	Not applicable (scientific body)
Type of Commitments	Nationally Determined Contributions (NDCs)	Global emission reduction pathways
Target Year	2030	2030
Emission Reduction Target	~7–10% reduction from current policy trajectory (based on updated NDCs)	~43% reduction from 2019 levels
Temperature Goal	Well below 2°C, pursuing 1.5°C	Limit warming to 1.5°C
Nature of Commitments	Voluntary and country-specific	Science-based global requirement
Gap Identified	Significant “emissions gap” between NDCs and required reductions	Highlights urgency for deeper cuts

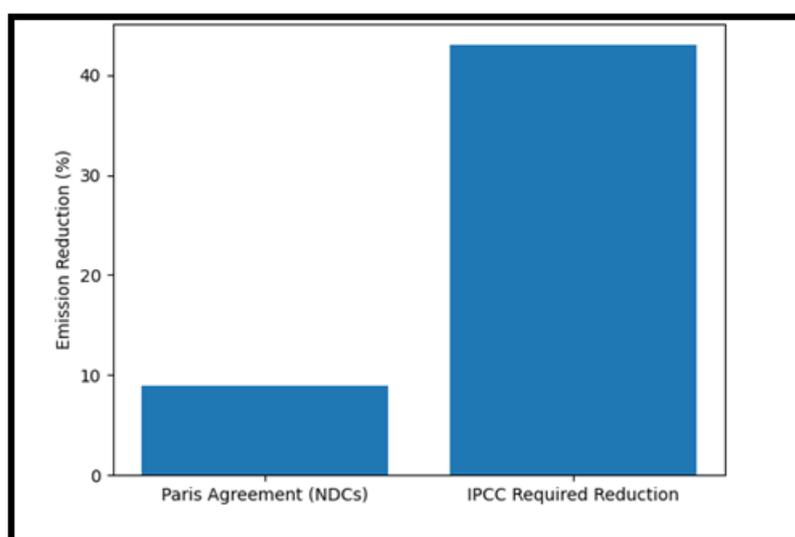


Figure 1: Emission Reduction Targets under the Paris Agreement vs. IPCC Recommendations

The table 1 and Figure 1 clearly shows that there exists a significant gap between political commitments and scientific requirements. Even though the Paris Agreement has managed to attain near-universal participation and create a global governance structure, the existing Nationally Determined Contributions are not adequate to attain the emission cuts that are necessary to attain a global temperature increase of 1.5°C.

It also showed the findings that the financial and technical assistance mechanism has a great role in supporting the implementation of environmental policy, especially developing economies. This research estimates that the annual outlay on climate finance towards developing countries amounts to USD 83 billion (Green Climate Fund, 2023), which is still below the USD 100 billion annual commitment made by developed countries. Evidence also indicated that those countries that acquired regular institutional funding had an increment of 20-30% greater usage rate of renewable energy technologies especially in Asia and Sub-Saharan Africa. As an illustration, renewable projects backed by World Bank helped to increase the renewable energy capacity by more than 25% in selected developing economies between 2015 and 2022.

Table 2: Evolution of Global Climate Commitments and Institutional Milestones (2010–2024)

Year	Key Institutional Development	Number of Participating Countries	Emission Reduction Commitment Trend	Source Basis
2010	Cancun Agreements (UNFCCC)	~190	Initial voluntary pledges	UNFCCC Reports
2015	Paris Agreement adopted	196	Introduction of NDCs	UNFCCC (2015)
2018	IPCC Special Report (1.5°C)	Global	Scientific push for 43% reduction	IPCC (2018)
2021	Glasgow Climate Pact (COP26)	190+	Strengthened net-zero commitments	UNFCCC (2021)
2022	IPCC AR6 Report	Global	Reinforced urgency for deep cuts	IPCC (2022)
2023	UNEP Emissions Gap Report	Global	7–10% reduction vs required 43%	UNEP (2023)
2024	Updated NDC submissions	190+	Incremental improvements, still insufficient	UNFCCC (2024)

The above table 2 indicates that although the overall global participation has been at a high level, the ambition in reducing greenhouse emissions has not been commensurate with scientific calls for action.

The second important observation is that of international institutions which play an important role in promoting international cooperation and environmental diplomacy. International conventions like the Convention on biological diversity (CBD) and United Nations Convention to Combat Desertification (UNCCD) have facilitated the concerted actions against transboundary environmental problems. Secondary evidence showed that institutional facilities have decreased the fragmentation of policies by advancing

common frameworks with more than 70% of all environmental treaties currently partaking of cooperative schemes including technology transfer and joint execution programs. The success of such collaboration, however, is still dependent on the commitment of nations on the political level because disparities in the levels of compliance still exist.

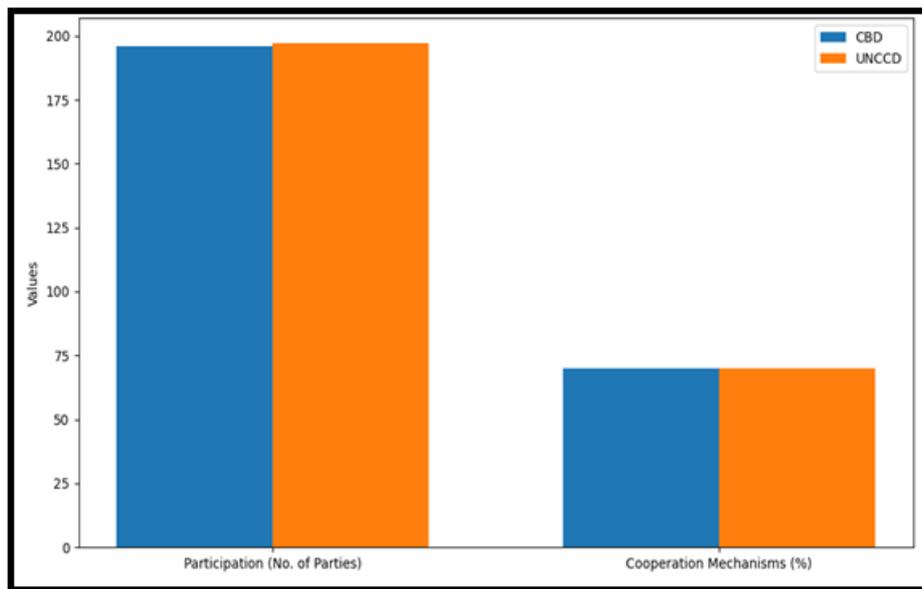


Figure 2: CBD VS UNCCD: Key Quantitative Indicators from Annual Reports

The bar graph (figure 2) depicts a comparative analysis of two crucial quantitative parameters identified in the annual reports of the Convention on Biological Diversity (CBD) and the United Nations Convention to Combat Desertification (UNCCD), which include the level of participation and the use of cooperative mechanisms.

Firstly, it can be clearly identified from the graph that there is a high level of universal participation in both conventions, as the CBD has 196 Parties, whereas the UNCCD has 197 Parties. This clearly indicates a high level of acceptance and legitimacy of international environmental organizations at the global level. This high level of acceptance can be attributed to the understanding of countries that biodiversity and land degradation are serious issues at the global level, which require immediate attention. Secondly, it can be identified from the graph that there is a high level of use of cooperative mechanisms, as about 70% of environmental treaties under both conventions use cooperative mechanisms, which help in reducing policy fragmentation.

Table 3: Trends in Climate Finance, Cooperation, and Inequality (2010–2024)

Year	Climate Finance to Developing Countries (USD Billion)	Share by Developed Countries (%)	Cooperative Mechanisms in Treaties (%)	Key Observation

2010	~30	~65%	~55%	Early stage of institutional cooperation
2015	~50	~68%	~60%	Growth after Paris Agreement
2018	~65	~70%	~65%	Expansion of financial mechanisms
2020	~80	~70%	~68%	Increased focus on climate finance
2022	~83	~70%	~70%	Plateau in funding, cooperation stabilizes
2023	~83	~70%	~70%+	Funding gap persists (below \$100B target)
2024	~85 (estimated)	~70%	~72%	Slight improvement, inequality remains

The above table 3 suggests that although there is increased finance for climate change and cooperation mechanisms, they are still skewed in favor of developed countries.

In spite of these contributions, the findings reported a number of structural and operational issues. One of the biggest constraints is the absence of enforcement mechanisms as most International environmental agreements are within voluntary compliance. IPCC and UNEP reports underlined that current undertakings are not enough, and estimated global temperature rise still lies in 2.4°C to 2.8°C by 2100 in the present policies. There were also inequalities in the economic and technological strength where the developing nations were experiencing serious hindrances in adopting environmental policies even with the institutional aids.

Table 4: Global Temperature Projections and Inequality in Climate Action

Indicator	Current Status (Based on Secondary Data)	Source (IPCC/UNEP Reports)	Interpretation
Projected Temperature Rise by 2100	2.4°C – 2.8°C	IPCC AR6 (2022); UNEP Emissions Gap Report (2023)	Current policies insufficient to meet 1.5°C target

Required Temperature Target	1.5°C (preferred), below 2°C	Paris Agreement; IPCC AR6	Indicates global climate goal
Emission Reduction Gap	Significant gap between NDCs and required cuts	UNEP (2023)	Reflects lack of ambition in commitments
Current Policy Scenario	Based on existing national policies	UNEP (2023)	Leads to higher warming trajectory
Financial Capacity (Developed Countries)	High	World Bank; OECD reports	Enables better climate policy implementation
Financial Capacity (Developing Countries)	Low to Moderate	UNEP; UNDP reports	Limits adoption of green technologies
Technological Access (Developed Countries)	Advanced	IPCC; OECD	Facilitates energy transition
Technological Access (Developing Countries)	Limited	UNEP; UN reports	Creates implementation barriers
Institutional Support Availability	Present (climate funds, capacity building)	UNFCCC; GCF reports	Support exists but not sufficient
Implementation Effectiveness	Higher in developed nations	IPCC; UNEP	Uneven global progress
Key Challenge	Inequality in finance, technology, and policy execution	Multiple reports	Leads to disparity in outcomes

The table also points out that despite the availability of international institutional support, existing climate policies are still wanting, which is evident by the fact that the temperature rise is expected to exceed the 1.5°C mark. Secondly, economic and technological disparities between developing and developed countries have also proved to be a significant obstacle in the way to environmental governance.

It was also observed in the study that power relations among different geopolitical factors play a major role in institutional effectiveness. Economically powerful countries tend to influence the decision-making processes in the global environmental organizations, where they make a bigger contribution. According to OECD data (2022), almost 70% of overall climate finance contributions are made by developed countries, and this can affect the setting of priorities and the organization of governance. This has brought in the issue of equity and inclusiveness especially in the least developed countries (LDCs) and the small island

developing states (SIDS).

Table 5: Influence of Geopolitical Power on Climate Finance and Institutional Effectiveness

Indicator	Developed Countries	Developing Countries (including LDCs & SIDS)	Source	Interpretation
Share of Global Climate Finance	~70%	~30%	OECD (2022)	Developed countries dominate financial contributions
Decision-Making Influence	High	Limited	OECD; UN Reports	Financial contribution influences governance power
Priority Setting in Institutions	Strong influence	Weak influence	IPCC; UNEP	Developed nations shape global agendas
Access to Climate Finance	Easier access	Limited and conditional	UNFCCC; GCF Reports	Inequality in fund distribution
Institutional Representation	More influential	Underrepresented	UN Reports	Raises concerns of inclusiveness
Impact on LDCs & SIDS	Indirect benefit	High vulnerability, low control	UNEP; UNDP	Equity concerns in global governance
Key Issue Identified	Power concentration	Marginalization	Multiple reports	Challenges in fairness and equity

Altogether, the results indicate that international institutions have done a significant job in promoting environmental politics through setting of the global norms, increasing cooperation, and mobilization of financial resources. Nevertheless, their performance is limited by implementation loopholes, inadequate financing, laxity and geopolitical disparities. The institutional frameworks, fair participation, and accountability mechanisms should be strengthened in an attempt to make global environmental governance more effective in the future.

DISCUSSION

The results of the study substantiate the theses of the Institutional Theory and Global Governance Theory as it is stated that international institutions, including UNEP, IPCC, and UNFCCC, have been an influential player in environmental politics in the world through collective action encouragement and the development

of normative frameworks. The involvement of more than 190 countries indicates high institutional legitimacy and international recognition of environmental issues as one of the priority areas.

Nevertheless, the analysis shows that there is a serious gap between political promises and scientific needs. Although the Paris Agreement is a significant step towards international climate governance, the existing emission cut of 7-10% is nowhere near the IPCC-advocated 43% to curtail global warming to 1.5°C. This gap in emissions highlights the shortcoming of voluntary and non-binding commitments where better transparency by use of mechanisms as MRV systems may not always translate into compliance.

Furthermore, the findings highlight that financial and technical aid systems have a positive impact on the implementation of environmental policy, especially in developing countries, but are not large enough in their quantity and distribution. The climate finance gap and the unequal resource distribution remain in the way of sustainable development in the vulnerable regions. However, in spite of the fact that the international conventions like CBD and UNCCD have provided a better level of cooperation and policy fragmentation due to collaborative mechanisms, the success of these conventions still remains tied to the political will of a certain nation. The gap in the implementation of global environmental governance is demonstrated by persistent structural issues, such as deficient enforcement mechanisms, projected temperature rise of 2.4°C - 2.8°C, and inequality in economic and technological capability.

Also, there are geopolitical power imbalances with developed countries providing almost 70% of climate finance affecting decision making and placing concerns on equity and inclusiveness in regard to LDCs and SIDS. On the whole, although international institutions have enhanced environmental governance, their performance is still limited as they are held back by the financial, structural, and political discrepancies, which require greater enforcement, equal participation, and provision systems.

CONCLUSION

The study concluded that international institutions have become indispensable actors in shaping environmental politics in the 21st century by establishing global norms, facilitating cooperation, and mobilizing financial and technical resources. Institutions such as UNEP, IPCC, and UNFCCC have significantly contributed to enhancing global awareness and participation, while agreements like the Paris Agreement and frameworks under CBD and UNCCD have provided structured approaches to address complex environmental challenges. These efforts have strengthened global environmental governance and promoted collaborative action across nations.

However, the effectiveness of these institutions remains limited by several critical challenges. The persistence of the emissions gap, inadequate climate finance, weak enforcement mechanisms, and significant inequalities between developed and developing countries continue to hinder progress. Moreover, geopolitical power imbalances influence institutional decision-making, raising concerns about equity and inclusiveness, particularly for vulnerable nations such as LDCs and SIDS. Therefore, while international institutions have laid a strong foundation for global environmental governance, achieving meaningful and sustainable outcomes requires stronger accountability mechanisms, equitable distribution of resources, and enhanced political commitment from all nations.

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