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## Leveraging the Quad for India's climate ambitions

APARNA ROY, *Fellow and Lead, Climate Change and Energy, Observer Research Foundation (ORF).*

CHARMI MEHTA, *Researcher, XKDR Forum and Asian Development Bank (ADB).*

### Abstract

Recognising the need for cooperation to address broader global challenges, the Quad—comprising Australia, Japan, India, and the US—established a Climate Working Group (CWG) in 2021 to broaden the scope and extent of the mini-lateral's engagement. While it is too early to evaluate the CWG's performance, the Quad has yet to put together a coherent climate agenda. The Quad's identity as a counterbalance to China has exposed it to a policy see-saw in the past; however, Quad 3.0 holds greater promise with member states, especially India, demonstrating renewed enthusiasm. India has been credited with solidifying and reshaping the Quad's position and is deemed the Quad's driving force, spearheading climate-related strategies and environmental resilience. While specialised multilateral forums dedicated to discussing climate policy exist, the Quad should be mobilised for matters that might not find a place on the global stage due to anticipated counter-activism from China. This paper recommends the construction of a new narrative for the Quad based on a shared commitment towards a rules-based order to further climate action, which includes (i) expanding collaboration and partnerships on critical minerals to liberalise global supply chains pertinent to electric and green technologies and (ii) advancing action on the Indo-Pacific's shared marine resources through the development of regional energy and economic infrastructure. These recommendations underscore the interlinkages between geopolitics, climate action, and economic policy, further highlighting the case for positioning climate action as a tangible agenda for future deliberations.

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## 1. Introduction

The Quad, a burgeoning mini-lateral forum that emerged in the wake of the 2004 Indian Ocean tsunami, is now at the forefront of global cooperation. It was originally formed to provide humanitarian assistance and enforce a rules-based maritime security order in the Indo-Pacific region (Mehra, 2022). However, recognising the urgent need for cooperation to address broader global challenges in addition to its original objectives, the Quad established working groups in 2021, broadening its scope to encompass climate change and resilient infrastructure.

Today, it is imperative to strengthen and streamline climate actions on a global scale. The Quad countries, which include the United States in the Pacific, India and Japan in South and East Asia, and Australia, encompass critical regions experiencing the multifaceted impacts of cascading climate crises. In March 2023, the members established the Climate Working Group (CWG) to foster cooperation on climate mitigation, adaptation, resilience, new technologies, capacity-building, and climate finance and to align actions with targets set under the Paris Agreement on Climate Change at the domestic, regional, and global levels. While it is too early to evaluate the CWG's performance or that of its individual members, it has been observed that the Quad's commitments in terms of climate action are generally broad, reflecting a recognition of the differing priorities of the four powers. Regrettably, the Quad has yet to articulate a coherent climate narrative.

Nevertheless, the Quad's shift in focus to climate action raises crucial questions. Can a select group of like-minded nations truly wield meaningful influence over immense global challenges? Considering that the CWG is still in its early stages, and existing forums already address a wide spectrum of climate-related issues, is the Quad well-positioned to drive the climate agenda in the Indo-Pacific region? Furthermore, which specific aspects of climate action offer the most promise for successful

collaboration within the Quad? Given the varying levels of commitment to climate action among Quad member countries, who will step up to provide the necessary leadership for advancing the climate agenda?

The battle against global warming is already underway in the Indo-Pacific, a region frequently experiences devastating weather events that result in numerous casualties. This demands resolute leadership and a readiness to confront challenges head-on. The leaders within the Quad must convince others that maintaining the status quo is no longer an option. As one of the key players in the Indo-Pacific region committed to achieving net-zero emissions, India stands poised to assume a leadership role in navigating these complex waters. However, the question remains: will the Quad enhance India's climate interests? This policy brief examines the motivations for the Quad's engagement with climate action, explores why India should collaborate with the Quad to advance its climate agenda in the Indo-Pacific, and offers an analysis along with recommendations for an actionable climate agenda that can yield tangible results.

## 2. Quad's Climate Focus: A Path to Common Ground

To address the urgent global challenge of climate change, the Quadrilateral Security Dialogue, commonly known as the Quad, has emerged as a significant player on the international stage. The Quad has shifted its focus from primarily security matters to climate change and environmental concerns, mirroring a growing trend of minilateral cooperation among smaller groups of nations.

Since its inception, while the Quad has not played an active role in promoting defence and security with respect to counterbalancing China, it has, on various occasions, provided strategic support and presented a unified face on policy matters. This transformation began in March 2021 when the Quad held its inaugural leader-level summit. During this gathering, the members declared climate

change a top priority for the Quad and the broader Indo-Pacific region. The group's mission on climate was clear: strengthen the implementation of the Paris Agreement while fostering cooperation on climate mitigation, adaptation, resilience, technology, capacity-building, and finance.

In September 2021, the group expanded its objectives by adding the creation of a green-shipping network and the formation of a clean-hydrogen partnership to its agenda. The momentum continued in May 2022 with the launch of the Quad Climate Change Adaptation and Mitigation Package (Q-CHAMP). Despite this, the Quad is yet to generate a climate narrative for itself. The heads of the Quad countries' development-financing agencies also convened to explore solutions for bridging the infrastructure-financing gap in the region (Mehra, 2022). At the 2023 leaders' summit, the Quad issued a "Statement of Principles on Clean Energy Supply Chains in the Indo-Pacific", and the leaders also announced a Clean Energy Supply Chains Initiative to fast-track the region's transition to clean energy (Quad Climate Working Group, 2023). Additionally, the Quad initiated a shipping task force, bringing together prominent ports such as Los Angeles, Mumbai, Sydney, and Yokohama to establish two or three low-emission or zero-emission shipping corridors by 2030. The task force also facilitates meetings among Quad transportation and energy ministers to further enhance cooperation (Mohan & Govella, 2022).

Therefore, what prompted the Quad countries to make climate change a central focus? Their shared apprehension about the severe threats posed by climate change to their nations and the entire Indo-Pacific region was a driving force. Moreover, climate change has gained prominence on the domestic political agendas of these four partners in recent years, making coordination and cooperation a logical step (Govella, 2022).

The move towards multilateral initiatives like the Quad can be seen as a response to the perceived slowness and ineffectiveness of

international institutions in addressing urgent global challenges. By concentrating on climate change and other non-traditional security issues, Quad members aim to showcase their ability to cooperate effectively and provide tangible benefits.

The inclusion of climate change in the Quad's agenda marks a strategic shift towards improving the quality of public goods in the Indo-Pacific and the global community at large. Originally seen as a security-focused group, the Quad faced perceptions of being an anti-China coalition and of excluding smaller Indo-Pacific nations from important regional decisions. By broadening the scope of its engagements to include broader global agendas such as climate action, the Quad aims to foreground the "like-minded" nature of the partnership toward addressing key global challenges.

### 3. Climate Diplomacy: India's Quad-Climate Nexus

China's rise to superpower status through economic expansion has led to a perceived need for an appropriate strategy to challenge its economic dominance. Many of the member countries have felt the impact of Chinese aggression. Japan is concerned about China's activities in the East China Sea; Australia faces trade disputes due to its call for an investigation into the origins of COVID-19; and the United States keeps a watch on China's bullying of littoral countries in the South China Sea (Chatterji, 2021). China's emergence was made possible by the global dependence on China for critical minerals (such as lithium, nickel, and graphite), global green supply chains, and technology licenses.

Though the Quad comprises four member countries, its remit also includes numerous nations situated along Indo-Pacific sea lanes that are key economic, political, and geographic partners to Quad members. While India has traditionally been cautious about entangling itself in alliance politics, several crucial sensitivities underscore its current

stance. At this point, inaction and the absence of proactive climate efforts could lead to dire consequences.

The group's uniting principles of fostering democratic and rules-based orders, free trade, and openness make it a forum with relatively less friction in addressing matters of global relevance, such as climate change. The newly formed working groups, including the CWG, help promote shared agendas and outlooks and highlight the group's shift towards undertaking tangible action on all fronts, including climate-related resilience, as a crucial component of regional and global stability.

India has consistently advocated for the Quad to evolve into an open, constructive forum that addresses regional security and stability comprehensively, encompassing more than just security matters such as climate action. To counter China's expanding footprint in the Indo-Pacific, India must invest in building regional energy architectures and a resilient green technology supply chain to boost its production prowess.

That being said, India's strategy within the Quad extends beyond countering China's influence. It seeks to strengthen ties with a wider group of countries and regions through non-military means, including climate change mitigation, supply chain strengthening, and infrastructure support. This multi-dimensional approach covers environmental, economic, and security aspects. India is the world's largest market for a green growth model, considering its huge development needs and the green mandate being at the heart of growth pathways. Ventures such as renewable energy capacity expansion require liberal supply chains, access to raw materials, and technology transfers.

While the Quad has had a shaky start (The White House, 2021; Biden et al., 2021), the perception that the US is overreaching in a non-judicial region, in addition to the economic and geographic relationships

between the members of the Quad and China, has remained the grouping's Achilles heel, resulting in members downgrading the mandate of the initial Quad (Buchan & Rimland, 2020). Nonetheless, climate change and the need for resilient global supply chains and infrastructures have emerged as common threads. Under Quad 3.0, India has been credited with solidifying and reshaping the Quad's position and is deemed as the Quad's driving force, spearheading climate-related strategies and environmental resilience (Press Trust of India, 2022). This newfound prominence led to the group's elevation to a leaders-level forum, reshaping perceptions resulting from China's initial dismissal of it as mere "froth in the ocean" to a potential "ASEAN-NATO" (Rej, 2020; Roy, 2021).

While it might be premature to evaluate the CWG's intent and effectiveness, it is imperative to examine how the climate issue serves the Quad's purpose. While there are more specialised multilateral forums dedicated to discussing the broader climate agenda, the Quad should be mobilised for matters that might not find a place on the global stage due to anticipated counter-activism from China. Establishing the CWG is the first step, but its success hinges on members finding common ground with regard to this agenda. This common ground should not only provide a purpose for this working group but also accommodate individual perspectives on climate action and varying paces of action (Roy, 2021).

The Quad can offer a respite by focusing on specific actionable sub-agendas, particularly in areas where broad global consensus exists, such as climate action. In this context, the narrative should position China not as the central determinant but as a distinguishing factor in the equation. Mobilising a forum such as the Quad, which includes like-minded countries with similar outlooks and anxieties regarding countries holding dominance over resources, raw materials, and supply chains, is essential and imperative to secure the future of

growth and development pathways in India.

#### 4. Expanding the Rules-Based Order to Include Climate Action

The Quad's third iteration, starting in 2020, marks a departure from its earlier institutional approach. The establishment of working groups, US President Biden hosting a landmark Quad Summit soon after assuming office, and the increasing frequency of high-level meetings indicate a growing inclination among member nations to leverage the Quad as a platform to further a broader global agenda.

Incorporating climate policy into this expanded institutional framework has numerous advantages for member nations. They can effectively address specific climate policy issues within a coalition of like-minded countries. This is particularly beneficial for India, which aspires to assume a leadership role in climate action within the Global South. While India's development trajectory necessitates the use of carbon-based power for the foreseeable future, it has reframed its climate agenda to prioritise low-carbon development over the West's decarbonisation framework. India has also steered the global climate discourse towards sustainable lifestyles (Mission Lifestyle for Environment—LiFE) and the use of per capita emissions as a robust metric for assessing climate action commitment rather than relying solely on aggregate national emissions. Further, India has consistently emphasised its domestic interests during the annual Conference of Parties (Roy and Mehta, 2023).

However, India's future development will increasingly rely on the growing adoption of electric vehicles, emerging green technologies, and renewable energy sources such as offshore wind energy. At present, China controls critical aspects of the clean energy transition supply chain, including offshore wind energy infrastructure, vital mineral reserves, marine resources, and global battery manufacturing capacity. The recommendations for shaping a Quad climate narrative cover (i) expansion of

collaborations and supply chain economics for critical minerals and EVs, and (ii) advancing shared economic resource Infrastructure in the Indo-Pacific which includes regional renewable energy infrastructure, for example - offshore wind technologies.

Minilateral cooperation has the potential to lay the foundation for broader regional and global initiatives. While climate change cannot be entirely resolved by the efforts of just four countries acting in isolation, minilateral endeavours can play a crucial role in aligning national interests and policies, preparing the ground for expanded initiatives involving additional nations. The sharing of knowledge and best practices among minilateral members can bolster policy effectiveness, spur innovation, and foster harmonisation.

It is essential to recognise the interconnectedness of climate change with other economic and security challenges. Consequently, climate considerations must be integrated into a comprehensive strategic approach; it cannot be tackled effectively in isolation from other pressing global concerns.

The Quad's focus on climate change is currently limited to a working group, and it is not a topic for assigned leaders' deliberation, limiting its potential impact when compared to a United Nations Framework Convention on Climate Change Conference of Parties. Keeping this in mind, fostering cooperation for mutually beneficial outcomes will require India's strategic leadership within the Quad, where it will have to work toward narrowing fields of advocacy to tangible and actionable agendas.

##### 4.1 Collaboration and Partnerships on Critical Minerals

Transitioning to a low-carbon future is an essential component of global climate action. Within this, clean energy and transport play vital roles in supporting a transition towards a more sustainable future. Thanks to technological advancements, renewables-based electricity generation has become cheaper and



more accessible. However, currently, China influences each step of lithium-ion battery production, from mining raw materials, and engineering advanced battery technologies, to making electric vehicles (EVs). For example, China produces 60% of the world's rare earth elements (REEs) and 34% of its supply of molybdenum. Approximately 69% of cobalt is mined in the Democratic Republic of Congo, with China accounting for the majority share in processing (65%) the mineral globally. Australia produces 52% of the world's lithium, with China being a major importer and processor of 58% of the global supply. South Africa mines 72% of the world's platinum output (Chadha et al., 2023). Though China has a limited national resource base, it has pursued a long-term strategy of building resilience and self-sufficiency in global resources through the ownership of mines in Congo and other African countries. China has steadily invested in Indonesia's nickel production, which will make the country the largest controller of nickel, manganese, and graphite by 2027 (Chang & Bradsher, 2023).

If countries are to take firm steps towards transitioning to low-carbon growth models, the supply and trade of raw materials for battery manufacturing must be liberalised. The present Chinese hold over critical minerals does not end at extraction and production; the world is also heavily reliant on China for processing these minerals. Currently, China refines 95% of the global manganese supply, 73% of cobalt, 70% of graphite, 67% of lithium, and 63% of nickel, largely on account of Western economies possessing near-zero processing capabilities (Chang and Bradsher, 2023). For example, Australia's first lithium refinery, which has some Chinese ownership, was approved in 2016 but failed to produce battery-grade lithium until last year (FERNYHOUGH, 2022). Over the years, China has spent more than USD 130 billion on research incentives, government contracts, and consumer subsidies, due to which nearly 54% of all EVs manufactured globally originate from China (IEA, 2023). That being said, the recent slowdown of the Chinese economy presents a domestic consumption challenge,

bolstering global interest in India on the EV front.

The growing domestic market for EVs gives India an edge over others, making it an opportune time to expand capacity and capability in the sector. The Indian transport sector is responsible for 13.5% of India's energy-related CO<sub>2</sub> emissions, with road transport accounting for 90% of the sector's total final energy consumption, making the electrification of public and private transport an essential pathway for climate action (Climate Action Tracker, 2020). On account of India's dependence on critical minerals to realise its climate and development goals, and the related potential threats to its sovereignty, advocacy to protect global supply chains is of vital significance to India and other countries—developed and developing. Securing a steady supply of lithium, cobalt, and other minerals from a diverse set of sources is in India's interest and supports the call for a rules-based international order.

#### *4.1.1 Leveraging the Multilateral Security Partnership*

The multilateral Minerals Security Partnership (MSP) was announced in June 2022, with the goal of bringing together countries to build robust critical minerals supply chains needed for realising global climate objectives (US Department of State, 2022). This partnership includes the US, Canada, Australia, the Republic of Korea, Japan, and various European countries. India joined the group in June 2023, as its membership was crucial for India's national security. The Quad presents itself as a useful platform for India to advance its agenda on this front, considering that all four countries are members of the MSP. The mandate of the MSP is to advance public and private investment in the critical minerals supply chain, which the Indian industry stands to greatly benefit from.

#### *4.1.2 Diversifying the Critical Minerals Supply Chain for Liberalising Climate Action*

The onus of ensuring critical minerals security in India is currently vested in Khanij Bidesh

India Ltd. (KABIL)—a joint venture of three central public sector enterprises—which works towards facilitating supply chains, mine asset acquisitions, and government-to-government collaborations (Chadha & Sivamani, 2022). A notable achievement of KABIL was the signing of a Memorandum of Understanding (MoU) (a three-year Critical Minerals Investment Partnership) between the Indian and Australian governments for cooperation in the fields of mining and processing critical minerals. However, India must also build similar bilateral partnerships with the US and Japan (Gupta, 2023) to leverage the recent discovery of lithium mines in Kashmir and changes in domestic policy, such as the release of a critical minerals list and the amendment to the Mines and Minerals (Development and Regulation) Act, 1957, which opened up the sector for explorations (PRS, 2023).

#### 4.2 Advancing shared economic resource Infrastructure in the Indo-Pacific

The Indian Ocean is among the largest tracts of open seas across the planet, encompassing the exclusive economic zones of 38 countries from the region. Its coastal countries are home to 2.7 billion people (Baruah, 2021). The Quad's ultimate mandate of furthering a rules-based international order is more pertinent to this arena of marine and maritime resources and freedom than any other. Several fora already exist that focus on the preservation of rights and freedoms attached to the high seas, such as the Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation (BIMSTEC) and the Indian Ocean Rim Association (IORA). However, the Quad remains unique in the dynamic of its membership, and the hegemony held by each of its members is unparalleled.

The term “blue economy” (BE) conceptualises oceans as “shared development spaces”, encompassing all economic activity relating to oceans, seas, and coasts, from fishing to renewable marine energy to coastal tourism. It is defined by the World Bank as the “sustainable use of ocean resources for economic growth, improved livelihood and

jobs, and ocean ecosystem health” (The World Bank, 2017). Oceans will benefit immensely through emissions reduction, as a slower rate of ocean change provides greater adaptation opportunities to the communities dependent on it. But oceans are also a channel through which climate action can be enhanced by effectively mobilising ocean resources.

While the role of marine biotic resources in preserving global food security through a seafoods-driven global protein supply and commercial resources (navigation, aviation, and transport) has received adequate attention, the ocean's role as a storehouse of abiotic resources (minerals, metals, and renewable energy in the form of offshore wind energy) has not been discussed enough in international relations and climate policy. There has also been significant deliberation on global platforms regarding the definition of a ‘blue economy’ and what it constitutes. While that may be ambiguous, working towards some well-defined and mutually beneficial outcomes can help advance the agenda in the interim.

The region is certainly resource-rich, but it requires a regional management strategy for sustainable development (Steinberg, 1999). There has been a significant rise in the number of preferential trade agreements in the past two decades (World Trade Organisation, 2011); yet, Indian Ocean countries lag behind the rest of the world, especially the United States and Europe, on the volume of free-trade agreements in place. In the absence of a regional approach to sustainable economic growth, bilateral arrangements and a Quad-driven mobilisation agenda on this front can help further mutual interests in the region and on the subject (Roy, 2019).

##### 4.2.1 Demonstrating a Low-Carbon Growth Model Through Regional Renewable Energy Infrastructure

Offshore wind farms generate electricity that eliminates the single costliest resource involved in renewable energy generation—land. India plans to auction seabed mining licenses for 4GW of offshore capacity off the coast of Tamil

Nadu in 2023 and has identified 14 sites in the state to which to expand this auction (Ramesh, 2023). Currently, constraints on account of the exclusive economic zone (EEZ), disruptions to marine life, and the lack of deep-sea construction technologies hinder the full realisation of this energy source as the future of renewable energy generation.

The US and Australia have made significant advances in this field, and India can benefit from knowledge sharing on this front and possibly even technology transfers. This will help the Quad effectively cooperate for the sustainable development of assets and showcase exemplary practices in establishing regional energy infrastructure in oceans and coastal regions. It will help boost energy security by diversifying sources of energy generation while fostering equity, inclusion, innovation, and modern technologies. Quad members hold significant stakes in the decarbonisation and climate agenda; hence, this point of action benefits each of their narratives. It can also open the gateway to cross-border investments in offshore wind energy capacity, opening up the world's oceans for offshore wind energy capture.

#### *4.2.2 Comprehensive and Effective Monitoring, Control, and Surveillance (MCS) Systems for Research & Development (R&D) in Oceans*

To achieve the goals of reducing non-sustainable fishing practices and realising sustainable development in the Indian Ocean, it is imperative to efficiently use monitoring and enforcement mechanisms. This would increase the commitment of state and non-state actors to the blue economy and its oceanic dimensions. Data concerning the Indian Ocean and its scientific scrutiny is usually limited and poorly shared. To monitor and improve cooperation and governance across the Indian Ocean, it is necessary to develop integrated systems that can identify and deter non-compliance through independent verification and auditing. This can be achieved by collecting additional data, improving data sharing, and conducting scientific analyses on marine resources,

and their environmental impacts in the region (Roy, 2019). Additionally, there are constraints associated with maritime boundaries on the high seas. For instance, even though seabed exploration in the Indian Ocean has already started, there are major constraints in the commercialisation of these resources. These stem from limited public data on the resources available in the exclusive economic zone (EEZ) and are compounded by a lack of capacity beyond the public sector for the exploration, mining, and processing of these minerals. In this context, a collective effort by the CWG to build time series databases on marine resources will not only help enhance the region's economic prowess but will also benefit each of the four member countries in identifying avenues for investments and climate finance that can further the achievement of their climate ambitions and goals.

## **5. Being a Force for the Global Good**

If the Quad wishes to define global narratives for decades to come, synergies and confluences will need to be identified and even engineered. In this case, the horizontal expansion of the group across members and working groups will prove effective in increasing areas of collaboration.

Fostering linkages between working groups such as the Climate Working Group, the Critical and Emerging Technology Working Group, and the Infrastructure Working Group will advance the intersectional nature of climate action, which necessitates an interdisciplinary and cross-cutting approach to problem-solving. These three working groups embody natural synergies for collaborative agendas that benefit all four member states.

These collective attempts to shift the Quad's narrative from being an anti-China group to a more holistic grouping in favour of a free and rules-based international order makes it more palatable to member countries and across the political spectrum in each of the



countries. The wide-ranging nature of climate action and its global ramifications makes it a suitable subject for active cooperation amongst Quad countries, which are also part of various multilateral forums and in broad consensus on the subject. The recently increased engagement of the Quad, supported by all four members, also signals the potential of the group to go beyond its past achievements by developing focused agenda items that capture the

aspirations of Quad members on the global stage. India, in particular, has championed the voice of the Global South, as demonstrated by its recent successes under the 2023 G20 Presidency. This shift in global narratives must be channelled to establish and cement the Quad's agenda on climate action, and India is well-positioned to play the role of an orchestrator.

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