



# AUSTRALIA INDIA INSTITUTE

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prosperous Indo-Pacific

## Australia-India Discussion Papers

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### AUSTRALIA, INDIA AND THE INDIAN OCEAN DEFENCE SPECIAL VISITOR PROGRAM

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The Australia India Institute is Australia's leading centre dedicated to enhancing Australia-India relations. In July 2024, the Institute hosted a delegation of four Indian Ocean security experts from India to engage with a broad spectrum of think tank, academic and policy professionals in Canberra, Sydney and Perth. These discussion papers were prepared in advance of this visit.



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## Connectivity Resilience in the Indian Ocean: Partnering for Submarine Cable Repair

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Submarine communication cables form the bedrock of global connectivity. Increasing the resilience of these systems would involve, inter alia, the introduction of redundancies i.e., introducing a greater number of cables with greater carrying capacity; as well as increasing the capacity of and capability in prompt maintenance and repair.<sup>1</sup> Given the cost factors associated with the installation of more cables with greater carrying capacity prompt repair capabilities provide a more effective method of introducing resilience in the cable system. Available repair capacity in proximity allows for a shorter turnaround time no matter the cause of initial disruption. Prompt repair also reduces the

losses suffered from cable disruptions which includes costs for routing data through alternative cables, and losses accumulated from slower or disrupted data connectivity. Hence, having adequate repair capacity within the Indian Ocean is important for resilient connectivity within the region.

However, the submarine cable maintenance and repair industry faces a severe capacity and capability crunch. Globally, around 70 maintenance and repair ships exist for communication cables with the bulk of the ships being in old condition close to retirement.<sup>2</sup> Moreover, there has been a profound increase in the number of communication cable projects without a corresponding increase in a maintenance and repair fleet. Even the current ownership structure is highly skewed in favour of players — public and private — from a few countries like France, Japan, the UAE, the US, and the UK which lead in cable repair capacity

globally.<sup>3</sup> The dearth of such capacity within Indian Ocean nations is particularly concerning. More problematic is the lack of capabilities i.e., a specialised and trained crew. Lack of awareness about the industry, its small and competitive size, national security concerns, and the time required to train people in cable repair contribute to the low recruitment and availability of skilled personnel.<sup>4</sup> There are potentially extreme delays in the repair of submarine cables due to high demand for repair ships, travel time to sites, and permits and clearances.<sup>5</sup>

These factors create national security concerns in times of peace but more so during armed conflict. Foreign dependence for cable repairs in times of conflict is a major vulnerability to India's and Australia's communications architecture. Times of conflict may trigger force majeure clauses of cable maintenance agreements rendering them unenforceable on non-performance. The mechanism involving determining repair priority, clearances for foreign-crew and foreign-flagged vessels, willingness of ship operators/crew to operate in contested waters, and soaring insurance premiums are additional issues that will arise during conflict.<sup>6</sup> The destruction of Nord Stream pipelines and the communication links between Finland and Estonia is indicative of the effectiveness and attractiveness of operations targeting seabed infrastructure. The repair industry, hence, holds immense potential for cooperation between India and Australia both bilaterally and within mini/multilateral constructs. This is true on both the strategic fronts as well as the commercial as the cable repair industry is estimated to grow at a compound annual growth rate of 9.88%. This cooperation can progress along two concerted lines of effort.

1. Joint ventures between telecom entities within partner countries to jointly build/ acquire/ retrofit and operate cable repair vessels.
2. Development of a skilled global workforce for cable repair through training facilities and opportunities.

New ships require steep investments (above USD100-150 million), which are ever increasing due to soaring input costs. Hence, the current practice frequently involves retrofitting ships for the purpose of cable repair. A notable recent example is the acquisition by S.B Submarine Systems Company Ltd. — a submarine cable installation and maintenance company based out of Shanghai, China — of an offshore construction

vessel originally built for servicing the oil and gas industry. This vessel was then retrofitted for submarine cable laying and maintenance operations and inducted as CS Fu Tai within a year (July 2021 (bought) - February 2022 (inducted)).<sup>7</sup>

A notable example of regional cooperation in this space has been ASEAN member states. On the commercial front, the ASEAN Cables Pte Ltd. (ACPL) — which is set up by the ASEAN Telecommunications Authorities as a joint venture between the public telecom companies of Thailand, Philippines, Indonesia, Brunei, Singapore, and Malaysia — has become one of the leading companies in the cable maintenance industry.<sup>8</sup> ACPL owns three cable repair vessels and is an active player in the SEAIOCOMA (South East Asia and Indian Ocean Cable Maintenance Agreement) Maintenance Zone. ACPL has further made investments in Sri Lanka to station a vessel at Galle, expanding the entity's reach and assisting in capacity development in Sri Lanka.<sup>9</sup> Such joint ventures contain much promise.

Efforts can be undertaken within the Quad Partnership on Cable Connectivity and Resilience or Australia's Cable Connectivity and Resilience Centre, both of which are focused on technical capacity building and the resiliency of cable systems.<sup>10</sup> Cable ship designs may be licensed from partners in Japan and the United States which can be used to retrofit in both India and Australia using interconnected supply links. Additionally, the establishment of crew training centres which can be fed by the talent from India and Quad member countries can address the shortage of skilled workforce. Similarly, AUKUS Pillar 2 'Advanced Capabilities' seeks to "foster deeper integration of security and defence-related science, technology, industrial bases, and supply chains."<sup>11</sup>

Through the Quad and AUKUS, pooling resources can achieve capacities and capability in the submarine cable domain for the collective regional benefit. Cable repair deserves the attention of policymakers in partner countries with India and Australia well-poised to take the initiative due to their special vulnerability with respect to the ready availability of cable repair capacities and capabilities.



# Beyond ‘Immediate Neighbourhood’: Western Indian Ocean within Australia’s Maritime Security Calculations

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Regional conceptualisations of the term Indo-Pacific are a not new practice. Since there is no agreed definition of what constitutes the region, different players define it differently. However, the domineering narrative tends to emphasise China’s outsized role in the mega-region and in turn, other nation’s interest in containing it. For Australia, the Indo-Pacific stops at the southern tip of India leaving out the western region of the Indian Ocean. Prioritising the ‘Pacific’ rather than the ‘Indo’ is motivated by two primary factors – Canberra’s acknowledgement of its capability and capacity constraints in the Indian Ocean and a realistic understanding of where its maritime insecurities are most acutely felt – the Pacific and Southeast Asia.

The cartographic division of the Indian Ocean Region (IOR) into the east and west IOR has several merits. It allows Australia to pursue a ‘strategy of denial’ and focus its efforts and resources on a more consequential region among its risk and security calculations – the ‘Northeast Indian Ocean’ as acknowledged in Australia’s 2024 National Defence Strategy.<sup>12</sup> China’s growing belligerence in this region through maritime grey zone tactics, opaque lending and propping naval infrastructure build-up is similar to the tactics it employs in the Pacific. Therefore, it is both prudent and pragmatic for Australia to prioritise upholding its national interests in its “immediate neighbourhood.”

However, Australia remains an Indian Ocean country boasting the largest Indian Ocean coastline in the region. Not only due to the city of Perth and Darwin or the Cocos (Keeling) Islands, Australia’s Indian Ocean interests are extensive, ranging from



environmental concerns, illegal fishing, people smuggling to search and rescue capacities. Foreign Minister Penny Wong's speech at the 7th Indian Ocean Conference in Perth in February 2024 signalled a shift in public messaging on the Indian Ocean.<sup>13</sup> The unprecedented threats faced on the Pacific Ocean side of the region are also faced on the Indian Ocean. Sub-regional organisations on both sides like the Indian Ocean Commission (IOC) and the Pacific Islands Forum (PIF) have a lot to learn from each other's experience of developing a common maritime security architecture.

Diplomatically, Australia has stepped up its engagement with the small island nations of the IOR like Mauritius, Seychelles, Madagascar and Comoros in an effort to integrate itself as a member of the Indian Ocean community. Whether deployments by the Royal Australian Navy (RAN) since the 1990s, participation in the European Union's Common Defence and Security Policy (CSDP) mission, the EUCAP Nestor capacity building mission in west IOR, or granting various developmental aid projects, Australia has remained active in this region. Canberra is going to launch a marine and coastal resilience hub under India's Indo Pacific Oceans Initiative (IPOI) to work on issues like marine ecology, threat of climate change and marine pollution and will also co-lead the Indian Ocean Rim Association (IORA) Maritime Safety and Security working group over the next two years. Australia's national science agency - the Commonwealth Scientific and Industrial Research Organisation (CSIRO) - through the IORA Blue Carbon Hub also seeks to build capacity among IORA members to protect and restore blue carbon ecosystems.

Improving the collective security of the Indo-Pacific and deepening the collective maritime competencies of IOR littorals is a fundamental goal for Australia and its like-minded partners including India. Doing so would require integrating the west IOR which has a combined coastline of over 15,000 kilometres and USD 333.8 billion worth of ocean assets into Canberra's maritime security calculations. Recent disruptions to maritime trade due to Houthi attacks in the Red Sea and Gulf of Aden highlighted the complex nature of interconnected challenges and the latent threat of piracy which had always remained in these waters. Australia's live animal export industry also took a hit when thousands of sheep and cattle bound for export to the Middle East were left stranded.<sup>14</sup>

There is merit in the west IOR figuring promptly within Australian security and policy considerations.

The region has emerged as a theatre of geostrategic competition where a multitude of regional and external actors are vying to carve a space for themselves. African leaders and governments have been cautious and vocal about the growing contestation in the west IOR. Some analysts have termed the prevailing situation in the region as the emergence of a "militarization dilemma," in which greater external naval presence would amplify the risk of strategic competition.<sup>15</sup> However, lesser naval engagement and operations could weaken efforts to secure shipping lanes, for which African littorals rely on high-end naval capabilities provided by external actors.

The west IOR has no shortage of capacity building initiatives and maritime security institutions ranging from IORA, the Indian Ocean Commission (IOC), Djibouti Code of Conduct (DCoC), Goa Maritime Conclave, Regional Maritime Information Fusion Centre (RMIFC), Regional Operations Coordination Centre (RCOC) and various activities by the European Union (EU). This is where Australia and India could leverage existing projects and resources to shape a positive maritime security architecture in the west IOR.

The Quadrilateral Security Dialogue's (Quad's) Indo Pacific Maritime Domain Awareness (IPMDA) which focuses on sharing real-time data in the maritime domain is a good place to start. Blue crimes in this region are committed by using small dhows which turn off their Automatic Identification System (AIS). Integrating satellite-based radio frequency data into existing maritime monitoring systems like the Indo-Pacific Regional Information Sharing (IORIS) platform would help improve maritime situational awareness, understanding, and action in the west IOR. Additionally, Google's latest investment in Umoja, a sub-sea fibre optical cable across the Indian Ocean that would directly connect Africa with Australia, will greatly enhance digital connectivity and connect Africa's major cities to the technology centres of the world.

Australia's understanding of its 'immediate region' is evolving with the addition of the 'Northeast Indian Ocean' to its traditional priorities of the Pacific and Southeast Asia. While capacity constraints and risk calculations limit its effort to this immediate region, the west IOR provides another important arena for Canberra to leverage existing projects, work with India to boost sovereign capability of littorals in the maritime domain, and better integrate itself into the Indian Ocean community.



# The Role of India-Australia Cooperation in Anchoring a Stable Indo-Pacific

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The only constant in the current era of turbulent geopolitics seems to be disruption. The polarising trajectory of US-China strategic competition, the multiple conflicts across geographies from the Middle East and Europe to the maritime hot zone of the South China Sea and Taiwan Strait, coupled with a staggered global economy hit hard by the pandemic—are all exacerbating tensions. Managing aftershocks to domestic stability and balancing global geopolitics have become central to emerging powers like India and Australia, especially with navigating shared concerns and challenges in the Indo-Pacific. The upswing in bilateral ties speaks to this convergence.

## STRATEGIC AFFINITY, CONCEPTUAL CONVERGENCES

Australia has under the Albanese government pushed for maintaining a ‘strategic equilibrium’ in the Indo-Pacific. A term introduced by Australian Foreign Minister Penny Wong, it captures multiple lines of effort applied by Canberra to secure its vision of a regional order—where countries have agency in terms of choices in their strategic partnerships, build diplomatic and economic capacity to manage and maintain the balance of power, but also a vision underwritten by “military capability.”<sup>16</sup>

Conceptually, India’s vision for the Indo-Pacific reflects similar priorities, outlined by Prime Minister Narendra Modi at the Shangri La Dialogue in 2018 (Security and Growth for All). It underlines a positive and inclusive vision, where all countries irrespective of their size have agency in shaping a collective future of the region. It reiterates that the

development and security agenda for the region are not mutually exclusive and focuses on capacity building, going beyond binary choices to offer tangible alternatives.<sup>17</sup>

Managing the China challenge has also bound the two nations together. The 2020 Galwan military clashes, which resulted in the death of 20 Indian soldiers was an inflection point for India-China relations. The breakdown of trust fundamentally altered New Delhi's strategic calculus, with now reciprocity to Indian sensitivities underwriting any diplomacy.<sup>18</sup> 2020 was also a transformative year in Australia-China relations, when its call for an investigation into the origin of COVID-19, made Canberra the target of harsh economic coercion. Though Australia has tried to reset its China relationship with a series of high-profile visits over the last two years, reports suggest that Beijing's insistence on framing "sovereign choices made by Australia" through the lens of competition with the US, has frustrated many.<sup>19</sup> The denial of agency by China is something that India understands well. Beijing often frames the Sino-Indian relationship through the lens of the Sino-US fallout, tuning out Indian concerns; berating New Delhi for being used by the US.<sup>20</sup>

With China being Australia's largest trading partner and a country with whom India has the largest trade imbalance, diversifying economic dependencies has been a key priority. China's incrementally built-up presence and increasing influence in the strategic neighbourhoods of India in South Asia, as well as its increasing adventurism in the Indian Ocean Region (IOR), is of mutual concern. Similarly, China's presence as a strategic actor in the Pacific Islands has amplified anxieties.

Conceptually, for India its mainstreaming of the Indo-Pacific vision prioritises the IOR while anchoring a meaningful presence in other geographies including in the Pacific. Australia too, which has enthusiastically embraced the concept of the Indo-Pacific, has in its latest Defence strategy framed how it understands its immediate region. The consecutive Defence Strategic reviews outline the shared approach of working with like-minded partners including India to not just burden share with the US,<sup>21</sup> but to also take advantage of the geopolitical calculations presented by India's rise,<sup>22</sup> as well as to manage China's increasing Indian Ocean reach and presence.<sup>23</sup>

## A FAST-TRACKED AGENDA BUILDING ON STRENGTHS

Clearly this conceptual clarity on convergences of interests has prioritised and deepened cooperation bilaterally and across multiple plurilateral platforms, most prominently in the Quad and enabled increasing cooperation in the IOR. Since 2020 India and Australia upgraded their relationship to a Comprehensive Strategic Partnership, held annual leadership meetings at the leader level, launched a 2+2 dialogue and concluded a mini trade agreement. Technology is a centre piece of the relationship with the bilateral framework arrangement for Cyber, and Cyber Enabled Critical Technologies, signed in 2020, which aims to boost and contribute to global development of critical and emerging technology such as artificial intelligence, 5G/6G telecom, internet of things, quantum computing, blockchain and big data.

Growing defence cooperation has been remarkable with a Military Logistics Support Agreement (MLSA), signing of the 'Joint Guidance for the India - Australia Navy to Navy Relationship,' joint military exercises including MILAN, AUSINDEX, PITCHBLACK, KAKADU, MALABAR and AUSTRALIND, military-to-military exchanges including training at military colleges, etc. Today dialogue mechanisms span cyber security, counter terrorism and space cooperation. Maritime security cooperation via mechanisms like the IONS (Indian Ocean Naval Symposium) & IORA (Indian Ocean Rim Association) remain central. The India-led Indo-Pacific Oceans Initiative launched on the sidelines of the East Asia Summit in 2019 has elevated the agenda to deliver practical cooperation. Under the Australia-India Indo-Pacific Oceans Initiative Partnership (AIPOIP) convergences with the ASEAN Outlook for the Indo-Pacific are being pursued to build on complementarities.

Interoperability has become a buzz word in cooperation with both militaries familiarising themselves with similar platforms. The successful deployments of Indian Navy P-8I aircraft to Australia and Royal Australian Air Force P-8A aircraft to India since 2022 for maritime surveillance is case in point. Today forces from both nations operate Boeing C17 Globemaster III strategic airlifters, Boeing P-8 maritime surveillance aircraft, Sikorsky MH-60 maritime helicopters, Lockheed Martin C-130J tactical airlifter planes and a host of trainer aircraft.<sup>24</sup> Under the ambit of the Quad, maritime domain awareness, subsurface domain awareness and anti-submarine



warfare have been major focus areas given mutual concerns of Chinese maritime expansionism. Recent military leadership visits from Australia have highlighted higher targets, noting that both nations have reached a stage of tactical interoperability and there is an opportunity to start coordinating activities and leverage combined resources to achieve “better levels of situational awareness.”<sup>25</sup>

Both sides have invested in a host of issue-based platforms to address rising challenges for the region. The Supply Chain Resilience Initiative (SCRI) launched by India, Japan and Australia seeks to reduce economic dependency, the bilateral Critical Mineral Research Partnership addresses the need to add value to Australian exports and work with India to commercialise technology that would help in not just unlocking new supply chains for these critical resources but also ensure it is done in a sustainable manner. Climate and energy are both issues of importance to Australia and India and have seen investments by Canberra in the India led International Solar Alliance (ISA) and Coalition for Disaster Resilient Infrastructure (CDRI). Digital health care which has seen a massive transformation in India is another avenue seeing increasing opportunities of cooperation.

## THE INDO-PACIFIC: A THEATRE OF ‘COMBINED’ OPPORTUNITY

Given the expansive ambit of cooperation and ambition for delivery of projects there exists scope for New Delhi and Canberra to now deliver on regional asks in their strategic neighbourhoods and the wider Indo-Pacific.

India’s G20 Presidency was a testament to its convening power but also put the development agenda especially for the Global South at the heart of the multilateral process. Notably, India’s G20 legacy is the spotlight it put on homegrown local templates from digital public infrastructure, health, climate mitigation efforts, sustainable connectivity initiatives, to the lens on gender-led development, which could be scaled up globally. On each of these issues, third country cooperation either bilaterally or via issue-based cooperation depending on the recipient country’s asks could be worked out whether in South Asia, Southeast Asia, or the South Pacific. Visible projects would go a long way in convincing countries in the Indo-Pacific on tangible alternatives rather than pushing them to choose sides.

India often battles zero sum game comparisons in South Asia and is perceived high on rhetoric and limited on delivery in ASEAN, just as Australia and the West’s approach to mitigating challenges of the Pacific Island Countries or ASEAN are criticised as security driven. Discussions on mutual resource availability and allocation to circumvent perception challenges and increase acceptability of critical projects could be undertaken, especially in the IOR and the Pacific. India’s competency in niche sectors like skill development & technical education, SME build up, climate and renewables could be scaled up with Australian help. Similarly, Canberra’s Development Cooperation assistance could help India scale up delivery on key projects in South Asia and ASEAN.

Specifically in the theatre of the IOR, Australia and India are now working together to expand and coordinate maritime surveillance activities. Both nations have built and expanded on presence near key chokepoints in anticipation of a larger Chinese naval presence. Maritime experts have long argued for the use of strategic islands like India’s Andaman and Nicobar Islands and Australia’s Cocos (Keeling) Islands for a joint coordinated efforts to monitor the three main passages into the Indian Ocean: the Malacca, Lombok, and Sunda straits.<sup>26</sup> Perhaps such ideas have found some traction in Navy to Navy talks. In May 2024, the 16th Navy to Navy Staff Talks in India, called efforts successful in exploring new avenues of cooperation in maritime partnerships, discussed enhancing operational interoperability and Maritime Domain Awareness (MDA).<sup>27</sup> These are clear signs of India not wanting to operate in silos and demonstrates that New Delhi is engaging partners like France, Australia and Japan to address blind spots. While US lawmaker efforts to introduce legislation to formalise an Indian Ocean strategy have been called symbolic, it seems like a step in the right direction in terms of building collective deterrence in the IOR.<sup>28</sup>

Notably, since both countries concur that the development and security agendas for the Indo-Pacific are not mutually exclusive, more synergies can be built in defence collaboration that could then build regional capacity. The 8th India-Australia Defence Policy Talks held in Canberra in 2023 explored the potential for the Indian defence industry to cooperate with the Australian Defence Force’s shipbuilding and maintenance plans.<sup>29</sup> Cooperation for joint research in underwater technologies, and

collaboration between defence start-ups of both countries for solutions to key regional challenges are also promising.<sup>30</sup>

Yet all of these strides can falter if domestic constituencies and critics of the relationship are not managed especially in the public square. Collective action for the Indo-Pacific will need mutual sensitivities and reassurance to be

prioritised zealously. Coordination of efforts to bring niche capacities to the IOR for maritime security, capacity and capability development will be closely watched by regional partners and adversaries alike. Tangible cooperation efforts by India and Australia both in the development and security domain will impact the choices these regional countries make in an era of systemic competition and rivalry.







# Green Foreign Policy: Enhancing India-Australia Strategic Partnership Through Renewable Energy Cooperation

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The global geopolitical landscape is undergoing significant transformations, with the Indo-Pacific region emerging as a focal point. The strategic partnership between India and Australia is central to these developments, particularly in renewable energy cooperation in the Indian Ocean Region. This commentary explores the current state, prospects, and strategic implications of India-Australia collaboration in climate mitigation through energy transition, emphasising how this partnership can counterbalance China's greying influence in the Indo-Pacific.

This collaboration can potentially enhance climate resilience among the Indian Ocean littorals,

demonstrating a solid example of cooperative sustainable development in alignment with SDG 17.<sup>31</sup> Enhancing commercial relationships with strategically aligned nations (friend-shoring) has become central to India and Australia's energy cooperation, which offers a space to generate economic pragmatism among the Indian Ocean littorals despite their geopolitical differences. Energy transition is accelerating faster in the Indian Ocean than in any other region. The electricity demand is projected to double in the next ten years in the Asian economies, with IEA's prediction that this region will use half of the world's electricity.<sup>32</sup> To achieve the net zero emission targets, creating a region-wide energy cooperation partnership to include wind, solar, hydropower, batteries, and pumped hydro in the energy mix is pertinent.

India and Australia have recognised the importance of integrating energy cooperation within their strategic partnership framework. Over the years, the renewable energy agreements between both countries have evolved from mere cursory projects that attempted to tackle greenhouse gas emissions to serious possibilities of investments in renewable energy technologies. This focus has percolated through recent collaboration on developing new and renewable energy technologies to accelerate the production and implementation of ultra low-cost solar and clean hydrogen.<sup>33</sup> Australian company Sunrise CSP and India's Engineers India Ltd have also agreed to work together on concentrated solar thermal power projects.<sup>34</sup> Similar are the recent advancements in wind energy, green hydrogen production, solar energy initiatives, and critical minerals.

The Australia-India Economic Cooperation and Trade Agreement, the Australia-India Comprehensive Economic Cooperation Agreement, and the MoU between India's joint venture KABIL and CMO Australia, indicates that five critical mineral projects are identified to be developed jointly.<sup>35</sup> Australia's rich deposits of critical minerals, including lithium, cobalt, and rare earth elements, position it as a key supplier in the global market, however, Australia is highly dependent on China for refining of these minerals. Conversely, India's burgeoning industrial base and commitment to technological progress under Modi 3.0 necessitates a stable and diversified supply of these resources – which can be fulfilled by Australia. Hence to be able to counterbalance China's overarching position as the leading refiner and manufacturer of these minerals and metals, countries like India and Australia should create partnerships for capacity building, knowledge sharing and technical advancement. This partnership also synergies with the climate goals of both countries to achieve net zero emissions as both electric grids attempt to move towards greener, cleaner, and low-carbon technologies.

The transition to renewable energy holds great promise for expansion within the Quad partnership for both India and Australia which presents a wide range of opportunities for middle-income and middle-power countries to leverage their resources and pursue a trajectory of development while safeguarding their strategic autonomy. In foreign policy, it is widely recognised that national interests always undermine alliances or hostilities. India is the third largest emitter of greenhouse gases

globally, while Australia is known for its substantial per capita emissions due to its reliance on coal, making it crucial for both countries to prioritise energy transition as a key national interest and an essential component of their foreign policy, such as adopting a green foreign policy.

As India embarks on another term under the leadership of the Modi government, which secured a hard-fought victory this time, the government will seek to establish a defining purpose for the next five years. Modi 3.0 seeks to establish a distinct position in global politics, particularly as a representative of the Global South. The focus on energy transition will become central in pushing the government to appeal to its voting bank, especially as the nation grapples with climate change-induced catastrophes. India's status as a leading manufacturer of solar panels has already opened up opportunities for expansion into Australia,<sup>36</sup> and Australia is innovating on solar-based thermal power generation in India by using mirrors to generate high-temperature heat.<sup>37</sup> Similarly, in the forthcoming Australian election, it is imperative for political parties to formulate an engaging agenda for their election manifestos, which presents a significant opportunity to prioritise energy transition as a central focus, particularly in the country's vulnerability to the effects of climate change.

The European Union's Carbon Border Adjustment Mechanism (CBAM) has caused significant challenges for India, especially in steel and cement, potentially affecting 26.4% of Indian exports.<sup>38</sup> However, Australia's investment in green steel in India through the India-Australia Green Steel partnership offers hope by supporting India's climate targets and creating employment opportunities in the resources sector. India's initiatives, including Make in India, align with Australia's strategic interests in promoting secure and resilient supply chains. Although it presents significant potential, such cooperation in energy transition remains in its early stages.

## **FUTURE PROSPECTS OF THE PARTNERSHIP**

As natural partners, both nations are moving away from coal dependence, and establishing a partnership based on trust and empathy is crucial for their prospects. Collaborating to mitigate each other's shortcomings is the way forward, and an illustrative instance is the Australia-India Strategic Research Fund (2023), demonstrating how investing



in crucial areas like new and renewable energy and resource circularity can promote technological interconnectedness within the region.<sup>39</sup>

Future avenues for strengthening collaboration lie in creating investment opportunities to facilitate government and private sector investments, reinforcing capacity-building, and enhancing technical expertise for renewable energy development. However, in a global landscape marked by resource nationalism and protectionist policies, creating norms, aligning standards and trade regulations for new technologies is crucial.

## **STRATEGIC IMPLICATIONS: COUNTERING CHINA IN THE INDO-PACIFIC**

Collaboration on climate action and bilateral cooperation between India and Australia is driven by ensuring national and regional resilience. Moreover, such collaboration presents a strategic opportunity for both nations to address the geopolitical challenges raised by an expansionist China. Escalating geopolitical tensions in the Indo-Pacific have fuelled a rising clamour for countries to 'decouple' or 'de-risk' from their economic and technological reliance on China. Currently, China accounts for 63% of rare earth mining, 85% of processing, and 92% of rare earth magnet production and is the world leader in renewable energy – and any attempts to de-risk from China could be catastrophic for the planet. Leveraging this dominance, China has imposed export bans and sanctions on critical materials like germanium and gallium, significantly disrupting global tech and green energy markets, raising national security concerns among western nations who fear overdependence on China.

The primary strategic advantage of India-Australia collaboration on renewable energy cooperation lies in diversifying supply chains and counterbalancing China's dominance. Through mutual cooperation, India and Australia can mitigate such risks by establishing robust frameworks, promoting joint research and development, and strengthening regional security measures through sustainable energy development and trade. This collaboration is vital for ensuring a stable reliance on clean, green, and affordable energy and fostering technological advancements crucial to respective economic and security interests.



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