Better Together
EU-India Cooperation in Addressing Climate Risks

History political cooperation between the EU and India has been characterized by benign neglect and unfulfilled potential. The risks associated with climate change presents potential avenues for stepping up EU-India cooperation and recalibrating political relations in an increasingly volatile international environment. This policy brief discusses how “Brussels” and “New Delhi” can work together beyond their own domestic transitions to reduce risks and enhance security across the wider regions. This includes using climate adaptation for peace and stability gains and securing a free and affordable flow of rare-earths needed for energy transition technologies. Disaster resilience, “greening the military” and managing the risks associated with energy transition may be new avenues for cooperation. But for this to happen, the EU and India need to acknowledge that climate change impacts and policies stretch beyond the realm of environment and economic development, since they also affect international security, migration and political relations in-and-between countries.

EU-India Relations:
Climate Security as an avenue for Political Cooperation

Over the years, political cooperation between the EU and India has been marked by a certain degree of ambivalence. Following India’s new economic policy of liberalization, privatization and globalization in the early 1990’s, the EU signed many cooperation agreements and strategic partnerships, but they failed to live up to any tangible action-oriented output. However, with India’s ‘emerging great power’ status and strategic presence in the Indo-Pacific region, the EU is actively seeking to recalibrate relations. Considering how to address the increasing climate-related risks provides a fitting opportunity, as both the EU and India are struggling with the impacts of climate change and challenge of energy transition.

The European Union (EU) seeks to be a global leader in climate action by presenting its Green Deal as a pillar of future economic growth agendas, pushing towards climate-neutrality by 2050. With an intermediate target to reduce emissions by 55% in 2030 compared to 1990 levels, it is embarking upon unprecedented transition policies affecting all sectors, testing the boundaries of public support for climate policy. In addition to mitigating climate change, the EU believes an early transition will strengthen its economy and international...
competitiveness. Moreover, the EU seeks to level up other countries’ level of ambitions, as expressed in their Nationally Determined Contributions (NDCs) under the Paris Agreement on Climate Change. The EU is now even contemplating to use its market power by placing a levy at its external border on high-carbon imports from countries without or with less of a carbon reduction policy, the Carbon Border Adjustment Mechanism (CBAM). Its climate diplomacy efforts are supplemented with a new commitment to spend at least 30% of its external action budget on climate-related activities.

India also sees the economic and competitiveness benefits of transition policies and technologies. Being one of the few countries on track to meet its NDC to the Paris Agreement, India is rapidly increasing its renewable energy capacity. New Delhi’s global leadership in the International Solar Alliance is further evidence of the political will to step-up as a green economy leader. However, worrying trends surrounding a rapidly growing carbon footprint and continued efforts to place climate change as a developmental issue are still key challenges.

Despite a clear display to undertake climate action, both the EU and India usually do not consider climate change through an out-and-out geopolitical or security risk lens. They emphasise the economic or environmental perspectives that concentrate on the costs and benefits of moving away from fossil fuels. Much of this narrative justifies climate action, but fails to recognise that beyond the economics, national and international security are at risk and require additional responses that go beyond the mainstream mitigation and adaptation policies.

Security risk posed by climate change – opportunities for peace

Addressing the impacts of climate change should be the primary driver behind the expansion of a bilateral relationship, since it is a topic of mutual concern. Being powerful regional players, the EU and India will be a natural focal point for support and will likely bear the brunt of climate risks in their respective neighbourhoods.

For the EU – droughts, forest fires, sea level rise, heavy rain and flash floods are climate phenomena that are increasing in frequency, duration and severity. Flooding in 2021 throughout various European countries caused over 150 casualties, further illustrating the danger of increasing extreme weather events. In recent years, floods and forest fires have occurred more often in several EU member states. Mediterranean Europe increasingly suffers from heat waves in summer and droughts that undermine local agricultural production.

The EU’s immediate neighbourhood is very climate vulnerable, particularly in the Middle East, North Africa and sub-Saharan Africa. These regions are undergoing issues stemming to desertification, water scarcity, and agricultural and ecological collapse, leading to a rise in rural-urban migration. Subsequent communal tensions put more pressure on countries that are already economically overstretched and politically fragile – not to mention the negative impact of conflicts and proxy tensions in Yemen, Syria and Kurdistan. Consequent migration to Europe puts pressure on resources and accelerates the rise of anti-immigration or nationalist sentiment, putting stress on European unity. World Bank estimates suggest by 2050, 86 million people from sub-Saharan Africa could be forced to

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internally migrate due to the worsening impacts of climate change.\(^5\)

Additionally, climate impacts and policies are further influencing security risks in the High North. Melting of Arctic ice caps is opening the region to economic exploitation, with quicker shipping routes and increasing accessibility to energy resources. Increased Russian military activity and greater Chinese presence in the Arctic is of huge strategic concern for the EU and NATO.\(^6\)

The Indian subcontinent is a region particularly hit hard by climate change, with unbearable heatwaves, extended flood risks and intense cyclonic activity worsening security. For example, the increase in frequency and intensity of seasonal storms in the Bay of Bengal have displaced millions, with most of them fleeing into India’s urban centres. Increased displacement from extreme weather events will likely pressurize regional and urban resources, many of which are already stretched thin. Even the economic cost for disaster response in terms of rebuilding critical infrastructure and restoring livelihoods is extremely high for India. In 2019, India registered the highest number of people displaced by disasters at 5 million.\(^7\)

Similar to the EU, climate-induced migration is a huge concern for India. By 2050, South Asia could witness 40 million people internally migrate owing to the impacts of climate change.\(^8\) Climate change induced cross-border migration is increasing ethnic tensions and undermining the security situation in India. The ethnic spill-over of mainly Muslim migrants from Myanmar and Bangladesh is likely to escalate religious and political tensions in India risking violence and ‘deepening societial tensions’.\(^9\)

Moving west, climate change is also impacting India’s long-time rival: Pakistan. The Global Climate Risk Index of 2020 places Pakistan as the fifth-most affected country by climate change in the last 20 years; India was the fifth-most affected country in 2018.\(^10\) Water scarcity, flooding and agricultural collapse are becoming more prevalent. Melting glaciers are contributing to shorter and irregular farming seasons. Subsequent flooding leads to rural displacement, such as those in 2010, that led to 11 million people displaced to the cities.\(^11\) The acceleration in disputed and unsustainable hydropower installation construction, is further changing the water flow. Given that Pakistan’s economy is mostly agrarian and dependent on regular flow, a primary sector collapse could worsen internal tensions, risking spill-over into India.

In the Indian Ocean, the Maldives is the lowest lying country in the world, with an average elevation of 1 metre above sea level. Rising sea levels threaten to wipe out the islands in the next century, which is likely to prompt further calls for support from India. Inevitably, climate change is worsening the country’s risk matrix, not just by increasing the direct climate risk for India, but also by tying up Indian resources in reactively supporting its neighbourhood in either tackling the consequences or absorbing their costs.

Hence, both the EU and India at home and in their respective regions are at risk of climate change impacting security, migration

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and geopolitics. This adds to the urgency of combating climate change by means of emission reduction and energy transition policies. However, since these will not have an immediate effect, it also requires taking account of climate consideration into early warning, conflict prevention and peacebuilding programmes, as well as linking climate expertise to migration and foreign policy. Specific areas where cooperation might be considered are disaster assistance and engaging the military.

Avenues for cooperation: disaster resilience and military decarbonization

Since the security dimension of climate change is becoming increasingly relevant, cooperation in the field of disaster preparedness and response could be vital. In 2021, the EU joined the Indian-led Coalition for Disaster Resilient Infrastructure (CDRI), 'an international platform involving public and private sector, aiming to promote resilience of new and existing infrastructure systems to climate and disaster risks while supporting sustainable development'.

Whilst no details of tangible EU support have been disclosed, the EU could look to increase the scope of its Directorate General of European Civil Protection & Humanitarian Assistance (DG ECHO) to include the South Asian region. This will allow financing and technical support on this subject to be more easily transferred.

A central initiative is the Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation (BIMSTEC). Exploring partnership agreements with BIMSTEC could be another practical entry point for the EU to increase its presence in the Indo-pacific, given how energy, climate change and environment & disaster management are all among the areas of cooperation within BIMSTEC. Additionally, EU member states are working bilaterally on supporting maritime security issues in the Bay of Bengal; France currently is part of the Indo-Pacific Ocean Initiative (IPOI), a non-treaty based forum to improve security cooperation in the region across areas such as maritime security and climate change; one of its pillars is 'Disaster Risk Reduction & Management'. The IPOI might serve as a good intersection for this to be achieved. French support in geo-spatial mapping and future climate-vulnerability assessments can be a model for wider EU-India climate security cooperation, with the likelihood of more joint-naval exercises such as the Varuna 2021 exercises in the Arabian Sea.

In June 2021, the European Union Naval Force (EUNAVFOR) and the Indian Navy successfully conducted their first anti-piracy exercises in the Gulf of Aden. Convergences between the European Union Naval Force (EUNAVFOR) and the India Navy could extend beyond these engagements, to include disaster resilience at sea. The EU and India could explore joint naval exercise mechanism in the Indo-pacific that involve disaster relief preparedness in its exercise curriculum. This also ought to reaffirm EU’s commitment to disaster risk reduction previously outlined in the April 2021 Council Conclusions on the ‘EU Strategy for cooperation in the Indo-Pacific’.

EU-India could also extend disaster preparedness cooperation to the armed forces. Militaries of EU member states and India both seem increasingly aware of their carbon and environmental footprint, even though they still lack accurate data. Up until very recently, militaries have been exempt from counting the cost of carbon

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12 Elizabeth Roche, "EU joins India's disaster resilient infrastructure initiative", Mint, March 18, 2021.


16 Council of the European Union, "EU Strategy for cooperation in the Indo-Pacific – Council conclusions (16 April 2021)."
emissions and subsequent decarbonization efforts. The Indian army has made positive strides, such as the opening of a new carbon compacting plant in Jammu & Kashmir (J&K) to reduce wastage, but the project remains an isolated case.\textsuperscript{17} The EU has recently accelerated its efforts to ‘green’ military activities through the release of its ‘Climate Change & Defence Roadmap’.\textsuperscript{18} Strategies such as smart energy camps, embedding environmental security advisors in operations and integrating renewable technology into transport are areas in which the EU, or rather armies of EU member states, such as the French Army, outperform India and could offer a framework to exchange best practices with India.

At the same time, unlike in the US, there is a justifiable cautiousness in the EU and India about climate change being misused as a reason for military intervention, additional budget requests or restrictive border control measures. This makes it all-the-more important to engage the military in not only climate risks and threats analysis, but also as contributors to the low carbon transition. The need to decarbonise is clear, but that is accompanied by increased geopolitical tensions and security risks, which prioritises operational effectiveness. Hence, policies must improve defence capabilities and reduce emissions simultaneously.

**Using energy transition to reduce fossil-fuel dependencies**

Reducing emissions, including these of the military, is not the only reason for transitioning to renewable energy. For both, the EU and India, renewable energy uptake is booming, yet dependency on foreign fossil imports and domestic coal persists. An energy transition is a way to reduce dependencies; simultaneously a loss of export revenues and subsequent economic contraction may sour relationships with fossil fuel exporting countries.

In 2019, nearly 69.3% of all energy in the EU was produced from coal, crude oil and natural gas.\textsuperscript{19} Russia remains the largest supplier of crude oil (30%), natural gas (41%) and solid fossil fuels (47%).\textsuperscript{20} The continuing crisis in Ukraine, fears of Russia being able to close off pipelines and splits amongst EU member states over a new gas pipeline, Nord Stream 2, demonstrate the strategic vulnerability of dependence on Moscow and this is a core facet of EU foreign policy.\textsuperscript{21} The EU is also keen to reduce its dependency on and costs of fossil imported from other regions, including the Gulf, Middle-East and North-Africa.

In comparison, India has a more complex energy outlook. In trying to provide energy facilities to every Indian household, the national government has to account for a population of over 1.3 billion with a growing per-capita energy consumption. Despite harnessing the potential in renewables and charting a course to meet its Paris Agreement commitments, India is far from being energy independent while being the 3rd largest global emitter of carbon dioxide.\textsuperscript{22}

India’s energy dependence is exacerbated by an undiversified supply; the Middle East alone provide 60% of its total crude oil supply.\textsuperscript{23} Regional political tensions have frequently led to rising oil prices, further

damaging India’s balance of payments account, which faces high current account deficits. According to International Energy Agency (IEA) estimates, India’s annual fossil fuel import bill is likely to triple by 2040.\(^{24}\) Energy supply stability is needed; to achieve this, both the EU and India need to diversify and actively engage with or even accelerate planned decarbonisation measures.

Support for each other’s transition has been a key point of discussion, for instance, most recently as part of the preparation for the EU-India Summit of May 2021. In the context of the ‘EU-India Connectivity Partnership’, they agreed to enhance financing, technical and regulatory cooperation to accelerate the transition away from non-renewables.\(^{25}\) Outside bilateral action, there is a commitment to open-up joint investment opportunities in ‘third countries’, particularly in the energy infrastructure sector.\(^{26}\) Offering more equitable loans to developing countries in South Asia, backed by a rules-based system, presents an opportunity for EU-India cooperation to secure vital renewable supplies. It will also help countries in the region to be less dependent on (fossil) investments through China’s Belt and Road Initiative (BRI).

**Reducing rare-earth dependencies on China**

To avoid shifting from one energy-related dependency to the next, safeguarding raw materials needed for the energy transition is key. Chief amongst these are rare-earth elements – a set of 17 elements whose properties are highly valued in electrical and electronic components, including technologies required for renewable energy generation and distribution. For example, Dysprosium is used in energy efficient lighting, wind turbines and electric vehicles.\(^{27}\) Despite their name, rare-earth elements are in fact relatively abundant; it is their geographic displacement within the earth’s crust, along with the high costs associated with extraction, refinement and production that posit rare-earth accessibility a challenge. Additionally, the refinement process is energy intensive and requires substantial capital investment.

The EU and India should be expanding the scope and depth of their involvement in the rare-earth sector for their own internal transitions and seek to break China’s monopoly over the global rare-earth market. China possesses the technology and capital to process and refine rare-earth resources. China also has the largest proven resources, amounting to 44 million metric tonnes, whilst total worldwide rare-earth reserves aggregate to 120 million metric tonnes.\(^{28}\)

The EU alone relies on China for 98% of its supply.\(^{29}\) Beijing’s ability to monopolize the resource amidst weak land protection rights and access rare-earth deposits through BRI, allows Chinese producers to set global pricing. EU dependency emerges as a geopolitical risk, as the EU is intimidated by the prospects of high export tariffs or a trade war with Beijing.

India is also in a similar situation; New Delhi currently relies on China, South Africa and Hong Kong for 95% of its rare-earth elements supply.\(^{30}\) This seems like a contradiction given India has the fifth-


\(^{29}\) Finbarr Bermingham, “China’s rare earth dominance casts shadow over Europe’s ambitious climate targets,” South China Morning Post, February 25, 2021.

largest rare-earth reserves globally.\textsuperscript{31} Should India fully tap into its rare-earth market potential, it can inject an estimated 90,000 crore rupees (over 10 billion euro) into the government’s budget per annum.\textsuperscript{32} An example of this potential are India’s Monazite beach sand reserves, which are the largest feasible deposits for light rare-earth elements in India. The compound contains Lanthanum, Neodymium and Cerium; all rare-earth elements used in magnets and battery alloys within renewable technologies.\textsuperscript{33}

However, this is where the positives end. Indian annual production barely tops 3000 tonnes; around 1% of the world’s annual output.\textsuperscript{34} Currently state-owned company, Indian Rare Earths Limited (IREL), controls the extraction process. It has chosen to focus on the Monazite deposits, which despite being low-cost in extraction, have a low overall international demand and the limited presence of cutting-edge refinement technologies limits India from benefitting fully commercially. Concerns over environmental damage and limited levels of government investment in capital extraction and refinement mean that an untapped potential is yet to be explored.\textsuperscript{35}

This is where EU involvement could help by diversifying its supply chains, facilitating technological upgrades, increasing market access and supporting market and regulatory reform. European companies have access to mineral refinement processes that can help lower the energy and capital-intensity needed for heavier extractions of rare-earths. Additionally, low-cost financing options can help incentivize an expansion of the Indian extraction portfolio, in exchange for preferential supply agreements with the EU. Moreover, if the Indian state is willing, market reforms to create an independent regulator, and allowing European firms to partner with Indian companies, might help to create new markets.\textsuperscript{36} These activities could be housed under an extension of the EU-India Clean Energy and Climate Partnership, a bilateral commitment to increase cooperation regarding clean energy and energy efficiency, a separate Raw Materials Partnership or integrated into the recently announced connectivity deal.

**Charting a way forward for EU-India relations on climate-related risks**

The need to counterbalance China is high on both Brussels and New Delhi’s agendas with access to rare earth supplies being just one out of many concerns. Cooperation over the transition, with regard to rare-earths and preferred energy technologies and standards, can be of help. Additionally, the growing danger of climate change’s impacts in South Asia means that India will become more burdened with the pressure of absorbing migration, finance and resource costs from the neighbourhood. This is where bilateral cooperation could make structural contributions to India’s regional efforts and ability to respond to increasingly more dangerous climate-induced security risks.

The EU is clearly interested to step up cooperation with India, especially in connection with the geopolitical importance of the Indo-Pacific.\textsuperscript{37} Progress could be made on several fronts, and one of them is on the issue of climate risks. For both


\textsuperscript{32} KVL Akshay, “India not realizing potential of rare-earth industry,” The Economic Times October 2016.

\textsuperscript{33} Kanisetti et al, “A Rare Earths Strategy for India,” 2020.


\textsuperscript{35} Anirudh Kanisetti, “OPINION: Here’s how India can end Chinese dominance in rare earths,” Business Insider, February 13, 2021.

\textsuperscript{36} Dr. Rahul Nath Choudhury, “The Production of Rare Earth: Why India Failed?,” South Asia Journal, December 5, 2019.

the EU and India, climate change has long been considered above all an issue of developmental and environmental protection with some links to energy security. Now the issue has trickled down to a much larger range of policy areas, in particular security, and has become more systemic. When looking through the risks lens, the following recommendations could be considered:

- Consider climate risks as part of the overall EU-India dialogue on climate change and energy transition.
- Specific to the Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation (BIMSTEC), encourage the discussion of climate change and subsequent security impacts to foster greater regional dialogue and seek avenues of cooperation as an external actor within the ‘Areas of Cooperation’ framework of BIMSTEC.
- Extend the EU-India joint naval exercise mechanism in the Indo-pacific, to involve disaster relief preparedness in its exercise curriculum. This could be achieved through full EU participation of the Indo-Pacific Ocean Initiative.
- Scale-up support to DG ECHO to enhance the CDRI through capability and regulatory support and financing instruments.
- Realise and utilise the potential of the military to contribute to the transition and manage security risks related to climate impacts. Cooperation between European and Indian armies/navies could be modelled on the EU’s Climate Change & Defence Roadmap, with elements adopted from the roadmap to the local South Asian security/geopolitical context.
- Step up efforts to enable EU or Indian-backed investments in energy infrastructure and renewables in third countries, and that could be a reasonable alternative to fossil investments through the BRI.
- Enhance bilateral cooperation over rare-earth production through European financing, technological transfers for exploration, extraction and refinement, and facilitating market liberalisation. Cooperation could be formalised through a distinct EU-India Raw Material Partnership, the recent connectivity deal or the Clean Energy & Climate Partnership.
**About the Planetary Security Initiative**
The Planetary Security Initiative sets out best practice, strategic entry points and new approaches to reducing climate-related risks to conflict and stability, thus promoting sustainable peace in a changing climate. The PSI is operated by Clingendael - the Netherlands Institute of International Relations.

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**About the Institute of Peace and Conflict Studies**
The Institute of Peace and Conflict Studies (IPCS) is an independent think-tank in India. It was founded in 1996 with the aim of developing an alternative framework for peace and security in South Asia and the extended neighbourhood. IPCS works to bring policy-relevant research into scholarly and public debate through events, capacity building of the next generation of thought leaders, and media and online outreach. Its research and policy recommendations do not subscribe to any particular political view or interest. This Policy Brief is part of the 2021 IPCS-Clingendael Institute collaboration on climate-security in Southern Asia.

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Clingendael – the Netherlands Institute of International Relations – is a leading think tank and academy on international affairs. Through our analyses, training and public debate we aim to inspire and equip governments, businesses, and civil society in order to contribute to a secure, sustainable and just world.

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