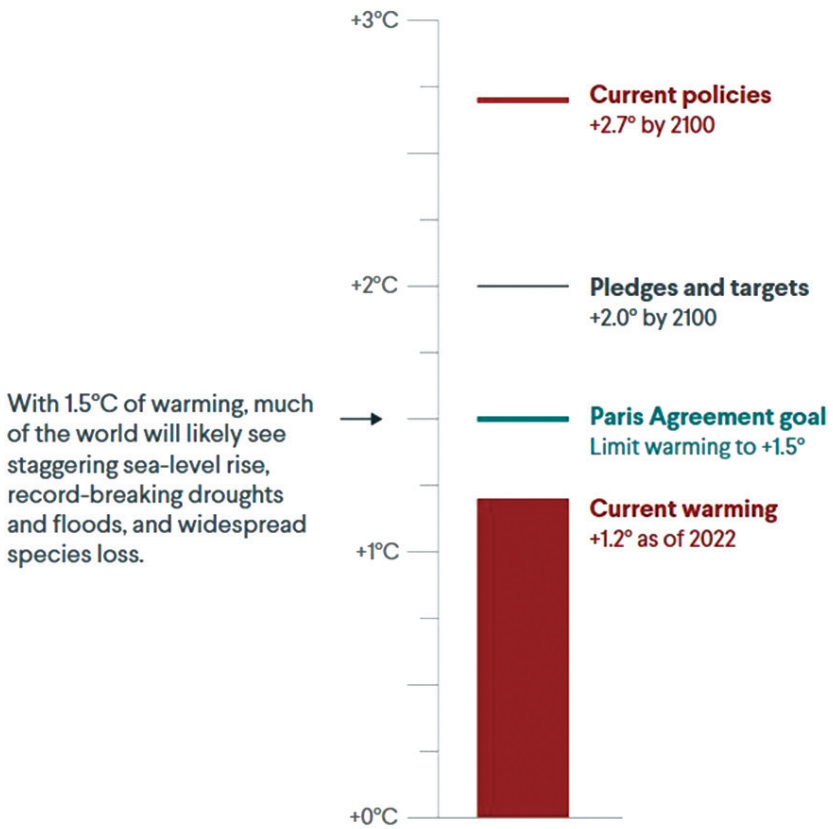
European Science Diplomacy for Resilience-Building During the Green Transition

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Introduction

The geopolitical dynamics between the United States and China, as well as the multifaceted implications of Russia's aggression against Ukraine, increase the role of science diplomacy in sustaining the global transition to meet the Paris Agreement adopted in 2015 during the 21st United Nations Climate Change Conference of the Parties to the United Nations Framework Convention on Climate Change (COP21).[1-5] This reference to the Paris Agreement is made in view of the first global stocktake of this agreement launched during the 28th Conference of the Parties hosted in Dubai in December 2023 (COP28) and its resonance in the international dimension of the ongoing greening of the European Union (EU).[6]



Global temperature rise over preindustrial average. Source: Maizland[7]

This article aims to highlight the role of EU supranationally steered strategic frameworks, such as the European Research Area, to continuously deliver tangible results and lasting achievements in evidence-informed resilience-building. The European Research Area is one of the key strategic enablers of EU science diplomacy. This united space for science and innovation helps to tackle multiple challenges linked to climate change, the socio-economic strains posed by geopolitical volatilities and considerations linked to the calls for a just transition. Drawing on the complementarities already established, the European Research Area is not the only strategic framework that converts EU science diplomacy into concrete actions and a globally coordinated endeavour. However, its role is unparalleled. Thus, this article builds on the prominent position of the European Research Area and projects funded by the EU Framework Programmes for Research and Innovation, especially in view of meeting the climate neutrality targets tied to 2050. This article mentions in very concise terms how thematic coverage of projects connected to the European Research Area in various matters of sustainability, such as Horizon 2020-funded projects on sustainable minerals extraction, proves its worth in addressing expert concerns about whether the path towards climate neutrality will be a just transition.[8]

The first part of the article builds on recent findings concerning EU science diplomacy towards the European Southern Neighbourhood*.[9] The post-Arab Spring** setting serves as an informative milieu and episode to detect understudied aspects of EU external action.[10,11] The second part briefly explains how ongoing work under other thematic EU frameworks than the European Research Area clarifies concerns tied to the ongoing green transition in Europe in partnership with the European Southern Neighbourhood. The concluding part explains how this science diplomacy-guided and green transition findings from the European Southern Neighbourhood can inspire the future forging and studying of the EU-India strategic partnership.

Learning from the Southern Neighbourhood Success

Considering the achievements of many projects funded by the EU Framework Programmes for Research and Innovation in the aftermath of the Arab Spring, the European approach to science diplomacy has a solid track record of offering and delivering targeted, comprehensive, and lasting support to tackle various sustainability challenges.[12] The lessons learnt about the EU's capacity to sustain gradual, pragmatic, and mutually agreeable resilience-building in the European Southern Neighbourhood on a variety of topics should be taken as a telling reference point about the indispensable role of the European Research Area in the vast toolbox of EU external action and EU diplomacy. The routine errands funded by the EU Framework Programmes for Research and Innovation seldom reach news headlines. However, it is essential to recognise the project-based achievements in sustaining evidence-informed resilience-building through regular encounters among research and policy experts, civil society, and the business sector and the co-creation of tailored solutions to the pressing challenges.

These valuable meetings often occur far away from the office spaces and buildings of EU delegations, national embassies, and the premises of regional and international organisations. Nevertheless, this lack of closeness to more formal halls, high-level meetings, and geographic separation from the listed venues does not diminish the significance of these outcome-focused meetings for understanding the entirety of post-Westphalian EU diplomatic practice and how the EU converts high-level directives into specific, cooperative tasks.

* The European Southern Neighbourhood refers to the geographic area of ten countries in North Africa and the Middle East near the EU: Algeria, Egypt, Israel, Jordan, Lebanon, Libya, Morocco, Palestine, Syria, and Tunisia. It is a part of the European Neighbourhood Policy, launched in 2004 following the EU's grand enlargement. The European Southern Neighbourhood is the policy framework for developing tailored and mutually beneficial relations and coordinated activities between the EU and each of the ten countries to manage interdependencies, strengthen resilience, promote prosperity, stability, and security.

** 'Arab Spring' denotes the mass protests and demonstrations that started in December 2010 and swept over North Africa and the Middle East. These pro-democracy popular uprisings had various implications on the political and regime evolution in Tunisia, Egypt, Libya, Yemen, and Syria. These domestic considerations were addressed in the country-specific consultations and joint actions of each country and the EU within the European Southern Neighbourhood and other policy frameworks and consultative forums developed in partnership with the EU.

The European Green Pivot in the Southern Neighbourhood

The green pivot is part of the twin – digital and green – transitions. This sustainability drive aims to ensure that the EU becomes climate-neutral by 2050. The green transition is linked to the evolving cooperation with the Southern Neighbourhood. The Neighbourhood has considerable clean technology potential, including untapped opportunities to develop and sustain clean energy exports to Europe. Nevertheless, this outward drive by the EU to seek new energy sources beyond its borders brings new considerations to the overall thinking revolving around the EU's open strategic autonomy. The green transition comes with new strategic dependencies and environmental concerns, for example, those linked to Morocco's cobalt mining.[13]

To briefly outline another example of increasing mutual dependencies and associated socio-economic and environmental considerations, the interest in partnering with the European Southern Neighbourhood is most visibly shown by the green hydrogen cooperation initiatives pursued by the Southern EU member states and Germany with the Northern African countries.[14-17] The national outreach to Northern African countries (among other considerations) encouraged the young generation of energy experts to highlight the importance of developing interregional cooperation, a coherent market, flexibility in hydrogen certification, and compatibility of certification schemes.[18,19] These are good examples of emerging green technology markets and multilateral considerations associated with the practical steps already taken with the overall European green transition and its external dimension.

EU-India Partnership Considerations

In the Indian context, resources linked to sustainable transition needs, for example, critical minerals, are associated with science diplomacy considerations. Indian researchers have identified critical minerals as an area where India should foster capacity-building ties with other democratic advanced economies, such as Australia.[20] There are concerns linked to the potential green grab of these precious resources as opposed to their use in a truly socially inclusive and transformative way to sustain the green transition.[21-23] In this article, green grabbing refers to the interest in possessing certain natural resources in the name of environmental and sustainability considerations.[24] This article adheres to understanding green grabbing as a quest for natural resources for entrepreneurial, industrial, and green consumerist purposes. In comparison, in some studies, green grabbing is applied to claims aimed at preserving and conserving certain areas of nature and wildlife.[25] This is only one example to illustrate the diverse meanings attributed to the term. Any claims or notions of green grab require advanced research capacity to detect such risks, including whether those are well-founded claims. Looking beyond assumptions and notions of green grab potential is essential. References to the green grab denote the importance of science diplomacy to strengthen the resilience of India in its pursuit to make the most of the green transition during the upcoming decades.

The EU has an opportunity to engage with India to strengthen its capacity to make just, inclusive, and sustainable choices during its transition towards climate neutrality. The numerous small-scale task-specific assistance measures offered to the European Southern Neighbourhood during the post-Arab Spring provide some food for thought concerning the value of the EU Framework Programmes-supported projects in raising awareness among diverse research, business, non-governmental circles, and public authorities about the methodologies, research applications, and training tools useful to make evidence-informed environmental choices and economically sound options for the way forward. Perhaps this experience in another geographic and socio-economic context may serve as an inspiration for the EU-India strategic partnership on how to structure some of its climate-neutrality-related joint activities. India is not new to the European Research Area. India-based entities have participated in projects supported by EU Framework Programmes. However, revisiting some achievements crafted in other geographic contexts might be helpful to maintain ambition for future potential collaborative actions.

To conclude, mutual resilience against the (claimed or acknowledged) risk of a green grab can be a point of joint effort and action in the vast thematic area of the EU-India strategic partnership. Given its advanced expertise in sustainability studies and environmental monitoring, the EU is in a good position to help India with certain aspects related to the scientific basis for systematic measurements and analytical

approaches to avoid the potential socio-economic drift associated with the green grab. Tailored science diplomacy support actions from the EU to India and co-creation initiatives might prove instrumental in addressing some scholarly encouragement to adopt research-driven processes and empowering India to make the most of its unique path towards climate neutrality, socially inclusive economic growth, and whole-of-society prosperity.[26] This project-based assistance approach should equip aspiring changemakers with the necessary advanced analytical capacity and green industry savviness. In such a time-bound and targeted manner, the EU could empower the next generation of Indian sustainability and climate-neutrality experts to translate their academic commitment into individual professional legacies throughout the subsequent decades of the global pivot to the climate-neutral world.

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