

5/2021

A Shared Understanding of India's Climate Policy? Insights from a Survey of Indian Climate Experts

Axel Nordenstam



PUBLISHED BY THE SWEDISH INSTITUTE OF INTERNATIONAL AFFAIRS | UI.SE





Axel Nordenstam Analyst, UI







Content

Executive summary	4
Introduction	5
Where the epistemic community encounters reality	7
Policy formulation	7
Decision making	
Implementation and evaluation	
Internationalisation	10
Methodology	10
How does the epistemic community view India's climate policy?	12
Drivers and impediments	12
India's evolving broadly based climate diplomacy	14
Implications for Sweden and the EU	20
Policy recommendations	22
Conclusions	24
Acknowledgements	26
References	28



Executive summary

- This report explores the perceptions of Indian climate experts on India's climate policy. There is vibrant scholarship and public debate on India's climate policy but this paper is the first survey of the opinions of Indian climate experts. The author regards the surveyed group of Indian climate experts as the epistemic community of Indian climate policy.
- India's climate policy has changed considerably since 2008. By introducing the notion of missions to India's domestic climate policy, the 2008 National Action Plan on Climate Change linked climate policy with multiple areas such as energy efficiency, water supply, and solar energy. India's 2015 Nationally Determined Contributions submitted prior to COP21 clarified India's climate policy for a global audience. The clean energy sector has undergone a notable upswing in recent years.
- The shared understanding among the experts surveyed is that the intensity of India's global leadership aspirations has increased under Prime Minister Narendra Modi, and the nexus between foreign policy and climate policy has deepened as a result. At the same time, however, the leadership agenda represents continuity since Modi's predecessor, Manmohan Singh, also sought a high standing for India in the international system.
- The report stresses that India's climate diplomacy is exercised on a global scale. All the respondents (N=25) viewed the International Solar Alliance (ISA) and the G20 as key avenues for India's climate diplomacy. In addition to the Intergovernmental Panel on Climate Change and the United Nations, India's climate diplomacy is exercised in several forums. However, there is little perception that climate diplomacy is being pursued in regional organisations such as the South Asian Association for Regional Cooperation. According to the epistemic community, the most important partners in India's climate diplomacy are the United States and the European Union (EU).
- Measures should be taken in the Indo-Swedish relationship, the EU-India strategic partnership and the Indo-Nordic format as part of the next steps in international cooperation. To foster cooperation on climate change, Sweden should use the EU track in its engagement with India and initiate an EU-wide approach to the ISA. Sweden's forthcoming Presidency of the Council of the European Union in 2023 could be critical.



Introduction

While India was in national lockdown in the spring of 2020, breathtaking photographs of the Himalayas and the blue skylines of India's megacities stunned people worldwide. With manufacturing halted and a minimal number of vehicles, the occasionally hazardous air reached a decent quality and induced dreams of a more sustainable future. The astonishing photographs even reached the Swedish media and a wider public audience. The climate is emerging as a key area of cooperation between Sweden and India. It is therefore high time for a closer look at Indian climate policy.

An increasing proportion of the international community is adopting midcentury, net-zero emissions goals. As more than 110 countries have announced such pledges, the tipping point for net-zero goals has been reached from a global perspective. However, Indian commentators disagree about the need for an Indian net-zero pledge.¹ While there is widespread agreement about the urgent need for climate action in India and abroad, concerns have been raised about the distant goal of climate neutrality by 2050 set by the United States (US) and the European Union (EU).

¹ See e.g. *Economic Times*. 2020. Time for India's net zero target. ET Editorials, *Economic Times*, <u>https://economictimes.indiatimes.com/blogs/et-</u><u>editorials/time-for-indias-net-zero-target/;</u> Navroz Dubash 2021. Should India consider a net-zero pledge? *Centre for Policy Research*, <u>https://environmentality.cprindia.org/net-</u><u>zero/should-india-consider-a-net-zero-pledge</u>
² Roy, Rathin 2020. "Decolonising Climate Action". Business Standard, 3 December 2020, <u>https://drive.google.com/file/d/1BeXKox_ooFqnf2xF</u><u>r4D9_60Q86ICjC/view</u> (accessed 3 December 2020). China's 2060 pledge is even further away. Others underline the fact that the climate action narrative ignores structural inequalities as a wealthy US, Europe or China sees a low-carbon global economy as resolving the problem while poor people will continue to experience low living standards.² Proponents, by contrast, view an Indian net-zero goal together with a new climate law as a potential job-creator and a contribution to the global solution.³

Be they researchers, politicians or think tanks, the Indian climate debate is rich with actors shaping the domestic discourse. These actors engage with, and sometimes within, institutions set up to govern India's climate policy.⁴ The Indian climate community constitutes an intriguing unit of analysis not just because of its involvement in policymaking, but through its manifestation of indigenous expertise. In the light of this crucial function of the community, this paper explores Indian climate experts' perceptions of India's climate policy. While a plurality of scholarly approaches and opinions enriches the debate and scholarship, the absence of a shared understanding runs the risk of complicating the domestic and international policy response to climate change. Identifying a common

³ Sinha, Jayant. 2021. "India's search for greener pastures should end in a climate change law", *Economic Times*, 10 March 2021,

https://economictimes.indiatimes.com/news/econom y/policy/view-indias-search-for-greener-pasturesshould-end-in-a-climate-change-

law/articleshow/81436498.cms (accessed 15 March 2021).

⁴ Dubash and Ghosh 2019. "National Climate Policies and Institutions" in *India in a Warming World: Integrating Climate Change and Development* edited by Navroz K. Dubash. New Delhi: Oxford University Press, 329–348.



understanding among expert opinion is therefore an essential task for any analyst attempting to provide insights on the current status quo and policy direction. To provide an original helicopter view of Indian climate policy, this report investigates the shared understanding of India's climate policy among the Indian climate expert community, how the Indian climate community perceives India's climate diplomacy and the implications for Sweden and the EU.

There is a wide-ranging literature on climate policy from an Indian perspective. Indian academics regularly contribute to Intergovernmental Panel on Climate Change (IPCC) reports. While some vocal research institutes, such as The Energy and Resource Institute (TERI), the Centre for Science and Environment (CSE) and the Centre for Policy Research, have operated for decades, others, such as the Council on Energy, Environment and Water (CEEW), have emerged more recently. The academic scholarship offers insights on aspects such as the narratives shaping the Indian climate debate, India's preferences and the multilevel governance system.⁵ The co-benefit approach guides the implementation of Indian climate policy by integrating development and growth at home with

combating climate change.⁶ In contrast to Western debates, which tend to focus on regulatory measures and carbon pricing to reduce the amount of emissions, the backbone of the co-benefit approach is to avoid increasing emissions. Edited volumes with contributions by various authors also deepen our understanding.⁷ There is widespread agreement that India's climate policy has shifted since 2008, when it adopted the National Action Plan on Climate Change (NAPCC). Recent analysis provides insights on India's climate action efforts since the 21st Conference of the Parties (COP) to the United Nations Framework Convention on Climate Change (UNFCCC) in Paris in 2015.8 There is a recognisable body of researchers dealing with the political and policy implications of climate policy from an Indian perspective.

Highlighting the collective thinking among experts, the public policy literature offers insights on how expert ideas inform the government responses. The pioneering Peter M. Haas defines such groups as epistemic communities, or "a network of professionals with recognized expertise and competence in a particular domain and an authoritative claim to policy-relevant knowledge within that domain or issuearea".⁹ Despite the growing academic

⁵ Rajamani, Lavanya 2009. "India and Climate Change: What India Wants, Needs, and Needs to Do", India Review, 8(3), 340–374; Dubash, Navroz K. 2013. "The politics of climate change in India: narratives of equity and cobenefits", *WIRE Climate Change*, 4, 191– 201; Jörgensen, Kirsten, Arabinda Mishra, and Gopal K. Sarangi. 2015. "Multi-level climate governance in India: the role of the states in climate action planning and renewable energies", *Journal of Integrative Environmental Sciences*, 12(4), 267–283. ⁶ Dubash 2013.

 ⁷ See e.g. India in a Warming World: Integrating
 Climate Change and Development (2019), Environment

Policy in India (2019), and the Handbook of Climate Change and India: Development, Politics, and Governance (2012).

⁸ Joshi, Madhura and Han Chen. 2020. "The Road From Paris: India's Progress Towards Its Climate Pledge", *National Resources Defense Council*, Issue Brief, 1–15,

https://www.nrdc.org/sites/default/files/road-fromparis-202009.pdf.

⁹ Haas, Peter M. 1992. Introduction: Epistemic Communities and International Policy Coordination, International Organization, 46(1), 3.



coverage of Indian climate policy, the literature lacks insights on the expert community's perceptions and assessments of Indian climate policy. Recent think tank research shows that climate change constitutes part of Indian strategic thinking,¹⁰ but only 9% of the Indian strategic community views climate change as the largest external challenge to India.¹¹ While the academic literature, think tank reports and edited volumes on Indian climate policy offer the insights of prominent authors on Indian climate politics and policy, no researcher thus far has asked the experts about their views. This lack of research opens the door for this study.

The paper starts by a contextualising Indian climate policy and discussing methodological considerations before presenting the results of a unique survey of 25 experts. The report then outlines the implications for the EU, makes recommendations to policymakers and draws some conclusions.

Where the epistemic community encounters reality

As a group of experts, the epistemic community operates within the policy cycle.¹² From a public policy perspective, the policy cycle sheds light on different stages of policymaking, from agenda-setting to policy formulation, decision making, implementation and evaluation. As Indian climate policy influences both domestic and international affairs, this paper adds the component of policy internationalisation in order to contextualise Indian climate policy.

Policy formulation

According to the Constitution of India, climate policy is dealt with at several levels since environmental affairs are a matter for both state governments and the national government. National environmental policy is governed by the 1986 Environment Protection Act and the 2006 National Environment Policy,¹³ but there has been a surge in climate policy formulation in the past decade.¹⁴ The 2008 NAPCC and India's 2015 Nationally Determined Contributions (NDCs) are the two overarching policy documents that outline the objectives of India's nationwide climate policy. The NAPCC, which was published in the run-up to COP 15 in Copenhagen, provides guidance on India's domestic climate policy. The 2015 NDCs should primarily be viewed against the backdrop of the global climate negotiations. When the NDCs were launched, some commentators optimistically viewed these as a "new climate plan" for India.15 Others unenthusiastically described the NDCs as a missed opportunity, as they primarily

¹⁰ Jaishankar, Dhruva. 2019. Survey of India's Strategic Community. Brookings India, 10, <u>https://www.brookings.edu/wp-</u> <u>content/uploads/2019/03/Survey-of-</u> India%Ea%&0%cons Strategic Community po

India%E2%80%99s-Strategic-Community.pdf. ¹¹ Ibid.

¹² Dunlop, Claire A. 2011. "Chapter 19: Epistemic Communities", in *Routledge Handbook of Public Policy*,
3.

¹³ Atteridge, Aaron, Manish Kumar Shrivastava, Neha Pahuja, and Himani Upadhyay. 2012. "Climate policy in India: what shapes international, national and state policy?", *Ambio*, 41, 68–77.

¹⁴ Dubash and Ghosh 2019.

¹⁵ Mitra et al. 2015. "Five Key Takeaways from India's New Climate Plan (INDC)", *World Resources Institute*. 2 October 2015: <u>https://www.wri.org/blog/2015/10/5-key-takeaways-india-s-new-climate-plan-indc.</u>



outlined India's existing policy.¹⁶ Alongside these national policy documents, the state governments formulate their own statelevel action plans on climate change.

A policy debate emerged following publication of a draft Environment Impact Assessment in 2020, as the Indian environmental community raised concerns about the process, content, and consequences of the draft.¹⁷

Decision making

Decisions on India's climate policy have been made by several different ministries. India's original Ministry of the Environment was founded in 1985, but 10 ministries currently deal with climate-related issues.18 These ministries adopt policies and implement missions. In 2019, for instance, the Ministry of Environment, Forest and Climate Change adopted the India Cooling Action Plan, which offers guidance on reducing the demand for air cooling and air conditioning in various sectors and on fostering more sustainable, energy efficient buildings. The ministries dealing with climate-related issues are able to set and adopt targets. The widely disseminated goal of having 175 GW installed renewable

energy capacity by 2022 was formulated by the Ministry of New and Renewable Energy.¹⁹

The Indian Prime Minister can make pledges, announce strategies and appoint experts. For instance, Prime Minister Manmohan Singh appointed the first Indian Envoy on Climate Change and set up the Prime Minister's Council on Climate Change.²⁰ While the Envoy was a short-lived position, the Council remains in operation. A more recent example is Prime Minister Narendra Modi's pledge to scale-up installed renewable energy capacity to 450GW by 2030, which was announced at the UN Climate Action Summit in 2019.

Implementation and evaluation

Introduced in the 2008 NAPCC, missions are an essential element of the implementation phase of India's climate policy. Five of the missions can be described as adaptation strategies: the National Water Mission, the National Mission for Sustaining the Himalayan Ecosystem, the National Mission for a "Green India", the National Mission for Sustainable Agriculture and the National Mission on Strategic Knowledge for Climate Change. In addition, three missions have mitigation characteristics: the National

raft-eia-notification-2020-is-it-contra-legem-tointernational-conventions-judicial-verdicts-73858. ¹⁸ Dubash and Ghosh 2019, 344–345. ¹⁹ International Energy Agency 2018. "India 175 GW Renewable Energy Target for 2022", <u>https://www.iea.org/policies/6466-india-175-gw-</u> renewable-energy-target-for-

²⁰ Chatterjee, Kalipada. 2007. "Top News on the Environment in Asia: India", *Institute for Global Environmental Strategies*, 34–39, : https://www.jstor.org/stable/pdf/resrepo0810.12.pdf.

¹⁶ Dubash, Navroz and Radhika Khosla. 2015. "Neither brake nor accelerator: Assessing India's climate contribution", *Economic & Political Weekly*, 17 October 2015. Commentary,

https://www.researchgate.net/profile/Radhika_Khosl a/publication/284746901_Neither_brake_nor_acceler ator_Assessing_India's_climate_contribution/links/56 9e399908aed27a703275f2/Neither-brake-noraccelerator-Assessing-Indias-climatecontribution.pdf.

¹⁷ See e.g. Chakravarty, Akhishek, 2020. Draft EIA notification 2020: Is it contra legem to international conventions, judicial verdicts. *DowntoEarth*,

https://www.downtoearth.org.in/blog/environment/d

<u>2022?country=India&page=3</u> (accessed 15 February 2021).



Solar Mission,²¹ the National Mission for Enhanced Energy Efficiency and the National Mission on Sustainable Habitat. As aspirational documents and policy guidance, the missions institutionalise Indian climate policy on a multitude of issues.

The policy response integrates different policy areas with their impact on climate change. The recent trajectory on missions is therefore worthy of note. The 2015 NDCs outlined India's intention to establish new missions on wind energy, health, waste to energy and coastal areas, and called for the national water mission and the national mission on sustainable agriculture to be refined. The environment ministry prepared the three new missions on wind energy, health and coastal areas,²² but they are yet to be officially launched. The government presented its plans for a National Coastal Mission to the Lok Sabha, but without officially announcing it.²³ At the same time as recommending a review of the eight existing national missions, the government think tank, NITI Aayog, has echoed calls for new missions on wind power, waste to

energy and coastal areas.²⁴ However, current political attention is on hydrogen. In November 2020, Modi announced a new Comprehensive National Hydrogen Energy Mission to provide the political impetus for an expansion of green hydrogen plants.²⁵

A recent review of the NAPCC by an Indian climate policy expert found progress reports available on three missions – solar, water, and enhanced energy efficiency – but little reporting on the other missions.²⁶ Separate ministries implement separate missions. Climate change issues are addressed by 80 personnel in 10 different ministries. Researchers contend that implementation is constrained by limited institutional capacity and this uncoordinated approach.²⁷

At the same time, forecasts underline that India's NDCs are compatible with constraining temperature rise below 2°C.²⁸ In comparison, the EU's climate action efforts are rated as insufficient and have a trajectory of a temperature rise of up to 3°C, while China is heading towards contributing to global warming of 3°C to 4°C. From a G20 perspective, India's per capita

²¹ Named after India's first prime minister, the mission on solar was launched in 2010 as the Jawaharal Nehru National Solar Mission. Since the mainstream description of it is the National Solar Mission, the report refers to it as the National Solar Mission.
²² Special Correspondent, 2017. "Climate change plan to get new missions", *The Hindu*, 25 January 2017, <u>https://www.thehindu.com/news/national/Climatechange-plan-to-get-new-</u> missions/atticea.acc.

missions/article17090498.ece.

²³ Press Trust of India, 2019. "Govt may set up National Coastal Mission to address climate change impact", *Business Standard*, 19 November 2019, <u>https://www.business-standard.com/article/pti-</u> stories/centre-mulling-setting-up-national-coastalmission-under-napcc-javadekar-

<u>119112901386_1.html.</u>

²⁴ Niti Aayog, 2018. Strategy for New India @75. November 2018, 107,

http://niti.gov.in/sites/default/files/2019-01/Strategy_for_New_India_2.pdf.

²⁵ Bhaskar, Utpal. 2020. "India to launch Nat'l Hydrogen Mission", *Mint*, 26 November 2020, <u>https://www.livemint.com/politics/policy/india-to-</u> <u>launch-national-hydrogen-mission-pm-narendra-</u> <u>modi-11606400112499.html</u> (accessed 27 November 2020).

²⁶ Rattani, Vijeta 2018. Coping with Climate Change: An Analysis of India's National Action Plan on Climate Change, *Centre for Science and Environment*, New Delhi, 32,

http://www.indiaenvironmentportal.org.in/files/file/co ping-climate-change-NAPCC.pdf

 ²⁷ Dubash and Ghosh 2019, 344–345.
 ²⁸ Climate Action Tracker, 2020. India: country summary,

https://climateactiontracker.org/countries/india/.



emissions are still below average, although they are expected to increase in the future.²⁹

Internationalisation

In the run-up to COP 15, India made a commitment to limit its per capita emissions to the average level of industrialised countries, announced an emissions intensity pledge and launched the NAPCC. Observers interpreted India's acceptance of voluntary commitment as a shift that showcased its intention to be a responsible actor in global governance talks.³⁰ While scholars disagree about the significance of this shift, they agree that India's climate policy changed.³¹

Another shift in India's climate policy emerged in the run-up to COP 21 in Paris in 2015. Instead of refusing to sign a global agreement – as had been widely feared by observers – India announced its NDCs two months prior to COP21. India signed and ratified the Paris Agreement in 2015 and 2016 respectively.³² Explaining the negotiation process, an Indian negotiator highlighted that India sought to "project itself as not part of the problem, but as a country keen to be part of the solution".³³ This shift in India's climate diplomacy prior to Paris implied increased attention to rulesbased governance and multilateralism, which has had a positive impact on India's engagement with the EU.³⁴

At the same time, however, the shift was part of contemporary strategic thinking about India's role in the world. When the then Foreign Secretary, Subrahmanyam Jaishankar, announced his vision of India as a leading power, he noted the importance of being considered "a responsible international stakeholder".³⁵ Six years later, the current Foreign Secretary, Harsh Vardhan Shringla, contends that India wishes to be "a leader in thought and action on climate", which would make India "unique amongst developing countries".³⁶

Methodology

In line with previous think tank research on India's strategic community,³⁷ this study was conducted using a survey of a selected

²⁹ Climate Transparency. 2020. Climate Transparency Report, <u>https://www.climate-transparency.org/wp-content/uploads/2020/11/India-CT-2020-WEB.pdf.</u>
³⁰ Betz, Joachim. 2012. "India's Turn in Climate Policy: Assessing the Interplay of Domestic and International Policy Change", *German Institute of Global and Area Studies*, GIGA Working Paper no. 190, 1–26.
³¹ Rastogi, Namrata Patodia 2011. "Wind of Change: India's Emerging Climate Strategy", *The International Spectator*, 46(2), 127–141; Dubash 2013, 194.
³² For an analysis on India's efforts on its pledge since COP21, see e.g. the report "The report from Paris: India's progress towards its climate pledge", *National Resources Defence Council*, :

https://www.nrdc.org/sites/default/files/road-fromparis-202009.pdf.

³³ Lavasa, Ashok. 2019. "Reaching Agreement in Paris: A Negotiator's Perspective" in *India in a Warming*

World edited by Navroz Dubash. New Delhi: Oxford University Press: 175.

³⁴ Interview 1. Author's interview with Indian academic, 25 June 2020.

³⁵ Ministry of External Affairs. 2015. "Remarks by Foreign Secretary at the release of Dr C. Raja Mohan's book 'Modi's World-Expanding India's Spheres of Influence; (July 17, 2015)". 18 July 2015,

https://mea.gov.in/Speeches-

Statements.htm?dtl/25491/Remarks+by+Foreign+Sec retary+at+the+release+of+Dr+C+Raja+Mohans+book +Modis+WorldExpanding+Indias+Sphere+of+Infuenc equotJuly+17+2015.

³⁶ Shringla, Harsh V. 2021. "Moving beyond Paris, India steps up its climate ambitions", Reuters. January 21, 2021,

https://news.trust.org/item/20210121095650-7f4b9. ³⁷ Jaishankar, D. 2019.

🚺 paper

group of respondents. The group can be considered well-informed respondents who constitute members of the epistemic community of Indian climate policy. The author collected email addresses for think tank experts, government officials, politicians, and business representatives in order to reach various stakeholders. Primarily, the author collected the email addresses of people who had published on aspects related to climate change and India on the platform India Climate Dialogue. Of the 184 email addresses collected, 161 proved to be functioning. The author distributed a web-based survey with closed and open-ended questions in September to October 2020. To enhance the response rate, the covering email specified the topic of the questionnaire, the sponsor of the research and the number of questions, and the survey was distributed from an professional email address.³⁸ No financial incentive was provided, but there was an option to be acknowledged in the report. Following two reminders, 25 people completed the survey, a response rate of 16%. These respondents had backgrounds ranging from academia and government to think tanks and the media. While the number of respondents can be considered low and is too low to allow statistical analysis, web-based surveys generally receive lower response rates than mailbased surveys.³⁹ The results of the survey indicate broader trends and patterns from the perspective of the Indian climate epistemic community.

For a second opinion on the survey results

and to explore the implications of the data, the author conducted four virtual consultations. The interviewees were given an opportunity to remain anonymous and were informed that their participation was voluntary. The interviews were conducted in October 2020 and lasted between 40 and 60 minutes.

³⁸ Blom, Annelies G. 2016, "Survey Fieldwork" in *The SAGE Handbook of Survey Methodology*: 385.

³⁹ Tse-Hua Shih and Xitao Fan, 2012. "Comparing Response Rates from Web and Mail Surveys: A Meta-Analysis" in *SAGE Internet Research Methods*, 371.



How does the epistemic community view India's climate policy?

Sections 4 and 5 present the results of the survey and discuss the findings. The unique data provides insights into perceptions on Indian climate policy.

Drivers and impediments

The survey results suggest that the result of the 2014 election influenced the evolution of India's climate policy (see figure 1). The larger the circle, the more important the factor.

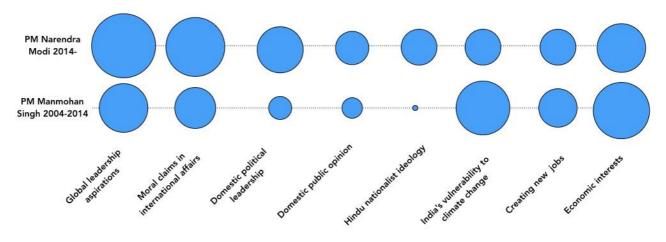


Figure 1. Factors driving India's climate policy

Under Prime Minister Manmohan Singh (2004–2014), India's vulnerability to climate change and economic interests dominated the evolution of India's climate policy.⁴⁰ According to the Indian climate policy epistemic community, economic interests and responding to climate change at home were the most important factors under Singh. Thus, connecting policy on climate change with policy on other areas, such as growth, constituted part of Singh's approach to climate change.

Under Prime Minister Narendra Modi (2014–), seeking global leadership and moral claims in international affairs were seen as the most important factors. It is notable that all the respondents saw global leadership aspirations as important for Modi's climate policy agenda. At the same

report Preparing India for Extreme Climate Events: Mapping Hotspots and Response Mechanisms by Abinash Mohanty highlights that more than 600 million people reside in extreme climate hotspots.

Source: Author's survey with Indian climate experts.

⁴⁰ Since 2007, India has continuously been ranked within top 20 most affected countries of climate change in GermanWatch's Climate Risk Index. In 2018, India was ranked as the fifth most affected country in the world. Similarly, the recent CEEW-



time, Modi has not de-emphasised India's moral claims in international affairs. While the global leadership argument has been strengthened under Modi, it has not replaced India's traditional stance, which correlates with the academic literature on India's promotion of Common But Differentiated Responsibilities (CBDR).⁴¹ An almost equally important factor, albeit not top of the list, is tackling unemployment through climate policy. More than half of the respondents viewed creating new jobs as a driver of India's climate policy. According to a Power for All report, the renewable energy sector across India will create 100,000 new jobs as soon as 2022-23.42 Similarly, long-term projections by the CEEW suggest that decarbonisation has the potential to create 3.6 million green jobs in the power sector by 2050.43

Comparing the aggregate results of the survey, some factors remain distinct, such as economic interests and global leadership aspirations, while others change. Hence, political leadership cannot be ignored and clearly affects the driving forces of India's climate policy.

The survey asked a closed question on the contemporary setting and the possible factors holding India's climate policy back. Figure 2 presents an overview of the perceptions of current obstacles. The larger the circle, the more important the factor.

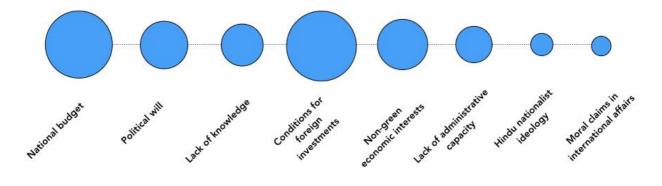


Figure 2. Factors impeding India's current climate action agenda

Source: Author's survey with Indian climate experts.

Establishing a low-carbon economy will mean reduced dependency on coal and more on renewable energy. It is therefore not surprising that almost every respondent highlighted the lack of a national budget as an impediment to India's current climate action agenda. At the same time, factors such as political will, lack of knowledge, the conditions for foreign investment, and nongreen economic interests are widely

https://www.powerforall.org/resources/reports/power ing-jobs-census-2019-energy-access-workforce. ⁴³ https://www.ceew.in/sites/default/files/future.pdf.

⁴¹ Chatterjee Miller, Manjari and Kate Sullivan de Estrada. 2018. "Continuity and change in Indian grand strategy: the cases of nuclear non-proliferation and climate change", *India Review*, 17(1), 33–54.

⁴² Power for All 2019. Powering Jobs Census 2019: The Energy Access Workforce,



perceived as constraining India's current climate action agenda. While respondents were not asked to indicate what they associated with "non-green economic interests", 71% of India's electricity originates from coal,⁴⁴ and India has the fifth largest coal reserves in the world.⁴⁵ The coal paradigm could therefore be considered an obstacle to India's climate action policy. The respondents disagreed on whether the moral claims that India continually makes harm India's climate action agenda. Half of the respondents saw moral claims as an important impediment, while the other half perceived them as unimportant. While the question arises whether continuing to promote moral issues will restrict India's aspirations to become a climate action leader, future research should explore the characteristics and meaning of these moral claims. Since the survey did not define these moral claims or issues, the respondents might have interpreted them differently.

Hindu nationalism affects Modi's climate policy but the respondents disagreed on whether it expands or constrains India's climate action agenda. Some experts view Hindu nationalism as a push-factor for India's climate policy, which has become more prominent under Modi, but others see Hindu nationalism as a factor preventing climate action. Again, there is a likelihood of divergent interpretations among the respondents as the survey did not define how Hindu nationalism might be affecting climate policy.⁴⁶

India's evolving broadly based climate diplomacy

The findings of the survey underline that the purpose of India's climate diplomacy is linked to both domestic and international rationales. This shared understanding of the purpose of India's climate diplomacy builds on two separate narratives – the development first narrative and the global leadership narrative. That these two mindsets provide the basis for India's broadly based climate diplomacy has implications for the wider world.

To explore the purpose of India's climate cooperation, the respondents were asked "In your view, what does India seek through its climate cooperation with the world?". Strikingly, every respondent indicated that a global leadership role was significant (see Figure 3). The respondents confirmed that India is seeking to promote its brand and increase its recognition in the world, albeit without any definitions of either option. Less consensus can be found on deepened trade ties, although few respondents rejected the nexus between economic relations and climate cooperation outright and several viewed it as important. On the domestic rationale, or the development first narrative, every respondent acknowledged that funding for projects in India is important, confirming that India forms

⁴⁴ Climate Transparency 2020. Climate Transparency Report 2020: India: 8, <u>https://www.climate-</u> <u>transparency.org/wp-content/uploads/2020/11/India-</u> <u>CT-2020-WEB.pdf.</u>

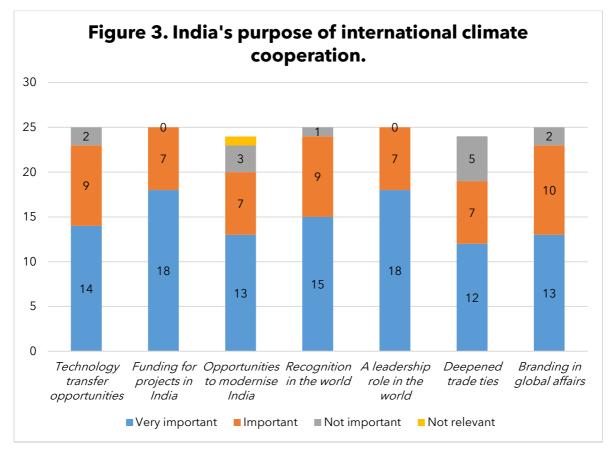
⁴⁵ BP 2019. Statistical Review of World Energy 2019, 42, <u>https://www.bp.com/content/dam/bp/business-</u> <u>sites/en/global/corporate/pdfs/energy-</u>

economics/statistical-review/bp-stats-review-2019full-report.pdf.

⁴⁶ The literature does offer some insights on how Hindu nationalism affects Indian climate policy. See e.g. Hall, Ian. 2019. Modi and the Reinvention of Indian Foreign Policy. Bristol: Bristol University Press, 92–93.



partnerships with the world to facilitate its own green transition. Almost every respondent indicated that opportunities for technology transfer are important to India's climate diplomacy.



Source: Author's survey with Indian climate experts.

The epistemic community believes that India's climate policy has remained principled (see Figure 4). High-profile principles in Indian climate policy – such as climate justice, and the Common but Differentiated Responsibility and Respective Capabilities principle (CBDR-RC) – are still promoted in its climate diplomacy. While equity could also be considered a core principle, however, almost one-third of the respondents believed that it is not being promoted. Interestingly, some respondents contend that India is promoting the principle of climate neutrality – a European description of the net-zero target.⁴⁷ Thus, India's international engagements on climate change remain principled.

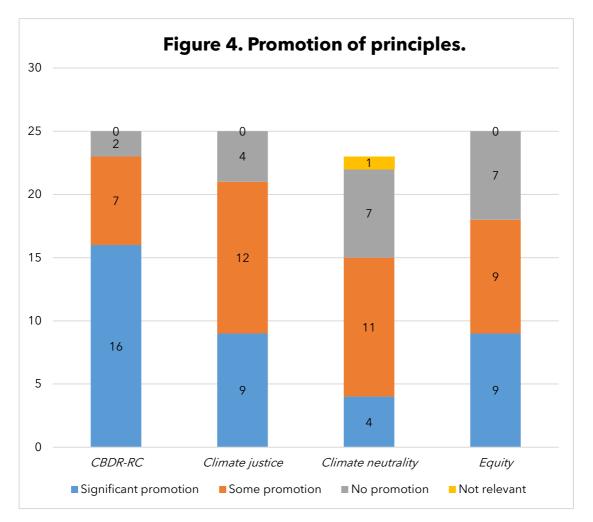
⁴⁷ See e.g. Geden, Oliver and Felix Schenuit 2019. Climate Neutrality as Long-Term Strategy: The EU's Net Zero target and Its Consequences for member States. *SWP Comment*, No. 33 August 2019,

https://www.swp-

berlin.org/fileadmin/contents/products/comments/20 19C33_Gdn_Schenuit.pdf (accessed 23 February 2021).



🚺 paper



Source: Author's survey with Indian climate experts.

Avenues

In contrast to the conventional understanding that international climate politics take place within the UNFCCC, the findings illustrate a broader scope for India's climate diplomacy. There is a broader tendency in India's climate diplomacy for global institutions to have a higher priority than regional cooperative formats. In fact, even though India has long prioritised its neighbourhood in its foreign policy, currently through its Neighbourhood First Policy and its Act East Policy in the Indo-Pacific, there are few signs of climate cooperation in its current neighbourhood policy.⁴⁸ Thus, while shifts can be identified

⁴⁸ For an analysis of India's Act East policy, see Dhruva Jaishankar 2019. Acting East: India in the Indo-Pacific, Brookings India Impact Series 102019-02, October 2019, *Brookings Institution India Center*,

https://www.brookings.edu/wpcontent/uploads/2019/10/Acting-East-India-in-the-INDO-PACIFIC-.pdf.



at the global level, there has been little change in regional frameworks, which are constrained by various factors. Figure 5 illustrates the broad scope of perceptions of Indian climate diplomacy. The larger the word, the more important avenue.

Figure 5. Avenues for India's climate diplomacy

International Energy Agency (IEA)

World Trade Organisation (WTO) United Nations (UN)

Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation (BIMSTEC)

Group of 20 (G20)

Non-Alignment Movement (NAM)

International Solar Alliance (ISA)

South Asian Association for Regional Cooperation (SAARC)

Coalition for Disaster Resilient Infrastructure (CDRI)

International Panel on Climate Change (IPCC)

Shanghai Cooperation Organisation (SCO)

Source: Authors' survey with Indian climate experts.

Among to the experts consulted, the International Solar Alliance (ISA) and the G20 constitute the most essential international forums for Indian climate diplomacy. The ISA operates as an independent body promoting solar energy in a similar way to a new multilateral institution. The ISA is a platform for engagement between India and various actors. Japan joined the ISA during a bilateral state visit by Modi in 2018. The ISA is a pillar of the climate cooperation within the EU-India strategic partnership. However, there is also an economic component of the ISA. When Modi inaugurated the 2018 ISA Summit he stated that the "ISA will have the same role in future" to that "currently played by



OPEC".⁴⁹ Thus, the ISA should not be seen as merely a platform for mobilising finance for a global green energy transition, but also as shaping the international politics of solar energy.

While the respondents' unwavering support for the ISA as a crucial climate diplomacy avenue is not surprising, the significance of the G20 as an economic governance and standard-setting body might be. India's forthcoming Chairmanship of the G20 in 2023 could be a reason for it to be considered an avenue for climate diplomacy. Another reason could be that developing and developed countries have an equal say in the G20. In the current policy debate in India, there have been calls for India to "write the rules for a more equitable global economics and governance" during its 2023 presidency.⁵⁰

India joined the International Energy Agency (IEA) as an associate member comparatively recently in 2017. Nonetheless, almost every respondent considered it important to India's climate diplomacy. Commenting on membership, minister Goyal highlighted the growing

https://timesofindia.indiatimes.com/india/isa-couldreplace-opec-as-key-global-energy-supplier-infuture-pm-modi/articleshow/66044985.cms.

⁵⁰ Mathur, Akshay. 2019. Preparing India for the G20 presidency in 2022. *Gateway House*, Indian engagement in the global energy markets and that its membership fosters energy security for the Indian population.⁵¹ In January 2021, India signed a strategic partnership with the IEA to deepen their cooperation into full membership in the future.⁵²

More than 20 of the 25 respondents viewed the IPCC, the UN and the Coalition for Disaster Resilient Infrastructure (CDRI) as important. India has long-standing engagements on climate issues within the UN, so it is no surprise that the UN is considered a key avenue for climate diplomacy. A recent example of Indian climate diplomacy in the UN is the Indiasponsored Gandhi Solar Park, which was installed at UN Headquarters in New York in 2019.53 Historically, the IPCC was the subject of controversy when it published inaccurate forecasts that the Himalayan glaciers would melt by 2035.54 Launched at the UN Climate Action Summit in 2019, the CDRI aims to improve the resilience of critical infrastructure, such as power, telecommunications, connectivity and

⁴⁹ Mohan, Vishwa, 2018. "ISA could replace Opec as key global energy supplier in future: PM Modi", *Times of India*, 3 October 2018,

https://www.gatewayhouse.in/india-g2o-presidency/ (accessed 3 February 2021).

⁵¹ International Energy Agency, 2017. India joins IEA family, a major milestone for global energy governance. 30 March 2017,

https://www.iea.org/news/india-joins-iea-family-amajor-milestone-for-global-energy-governance (accessed 3 February 2021).

⁵² International Energy Agency, 2021. India and the IEA enter new phase of closer collaboration with

signing of Strategic Partnership Framework. 27 January 2021, <u>https://www.iea.org/news/india-and-the-iea-enter-new-phase-of-closer-collaboration-with-signing-of-strategic-partnership-framework</u> (accessed 3 February 2021)

⁵³ ANI. 2019. "Over 130 solar panels installed by India on UN's rooftop: Prakash Javadekar". 25 September 2019,

https://energy.economictimes.indiatimes.com/news/r enewable/over-130-solar-panels-installed-by-indiaon-uns-rooftop-prakash-javadekar/71286064 (accessed 3 February 2021)

⁵⁴ Carrington, Damian. 2010. "IPCC admit mistake over melting Himalayan glaciers", *The Guardian*, 20 January 2010,

https://www.theguardian.com/environment/2010/jan/ 20/ipcc-himalayan-glaciers-mistake (accessed 16 March 2021).



housing, to natural disasters.55

Four-fifths of the respondents considered the World Trade Organisation (WTO) to be an influential forum, underlining how conditions for green growth are perceived in India's climate diplomacy. There was less agreement about regional cooperation bodies, such as the Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation (BIMSTEC) and the South Asian Association for Regional Cooperation (SAARC). At the same time, many of the respondents still considered these to be important forums. Although SAARC adopted a climate change action plan in 2007, it is yet to be translated into action.56 The respondents were divided on whether the China-led Shanghai Cooperation Organisation (SCO) is an important forum for climate diplomacy. The conventional format for countries historically regarded as "the Global South", the Non-Alignment Movement (NAM), received scant support. However, this finding should not be misinterpreted as India leaving developing country forums. Instead of fostering climate cooperation through the NAM, the ISA has emerged as a new platform for climate diplomacy for both developed and developing countries.

Partners

In contrast to the literature on India's positioning within the UNFCCC

negotiations, which stresses India's coalition-building at various COPs,⁵⁷ this survey finds that the EU and the US are the leading partners in India's climate diplomacy. While the results may tilt too broadly towards the EU because the respondents were completing a survey circulated by a European analyst, both the EU and the US have a long-standing, proven interest – and a willingness to invest – in India and recognise India as a global actor. Nonetheless, policymakers should be aware of the broader engagement on climate between India and multiple global actors.

The epistemic community is divided about China as a climate partner (see figure 6). While some contend that China is an important partner, almost half the respondents perceived China as either 'not important' or 'a competitor'. Even though China and India have cooperated within the UNFCCC as a BASIC negotiating group, and India is a member of China-led multilateral institutions such as the SCO and the AIIB, there is a suspicion of China among Indian climate experts. This is hardly surprising given China's growing coal sector, the recent clashes on the India-China border and India's continuous reluctance to the Belt and Road Initiative. Suspicion in other areas of Indo-Chinese relations influences cooperation on climate change. Russia's importance to Indian climate diplomacy is marginal. In fact, these findings suggest that the African Union is a more important

⁵⁵ United Nations Office for Disaster Risk Reduction. 2019. UNDRR welcomes India's launch of the global Coalition for Disaster Resilient Infrastructure. 24 September 2019, <u>https://www.undrr.org/news/undrrwelcomes-indias-launch-global-coalition-disasterresilient-infrastructure</u> (accessed 3 February 2021)

⁵⁶ Saran, Shyam. 2017. *How India Sees the World*. New Delhi: Juggernaut: 75.

⁵⁷ See e.g. Sengupta, Sandeep 2019. "India's Engagement in Global Climate Negotiations from Rio to Paris", in *India in a Warming World* edited by Nazroz Dubash, 114–141.



climate partner than Russia.

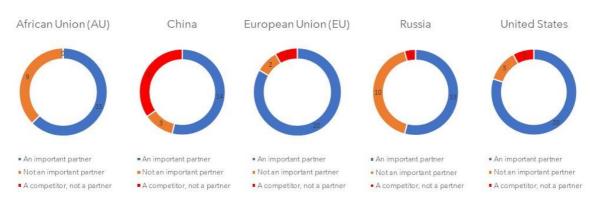


Figure 6. India's climate diplomacy partners

Source: Author's survey with Indian climate experts.

Implications for Sweden and the EU

On 5 March 2021, prime ministers Narendra Modi and Stefan Löfven underscored that climate change constitutes a central global challenge to be addressed by the Indo-Swedish partnership.⁵⁸ This message was not new. Three years earlier, they presented a similar joint message in Stockholm, that climate change is a "key international issue of mutual concern".⁵⁹ As the Indian Minister of Environment, Forest and Climate Change, Prakash Javadekar, and the then Deputy Prime Minister of Sweden and Minister for Environment and Climate, Isabella Lövin, interacted at Strategic

⁵⁸ See Ministry of External Affairs, 2021. Joint
Statement on India-Sweden Virtual Summit, 5 March
2021, <u>https://www.mea.gov.in/bilateral-</u>
<u>documents.htm?dtl/33592/Joint+Statement+on+India</u>
<u>Sweden+Virtual+Summit</u> (accessed 9 March 2021).
⁵⁹ Government Offices of Sweden, 2018. "SwedenIndia Joint Action Plan, agreed by Prime Minister
Stefan Löfven and Prime Minister Narendra Modi", 17

Forum India in 2020, they also shared the sentiment that climate action is urgently needed.⁶⁰ Historically, Swedish and Indian ministers have been

interacting on the issue since the United Nations Conference on the Human Environment in Stockholm in June 1972. Nonetheless, Swedish stakeholders struggle to understand India's contemporary policy choices and preferences on climate cooperation. While there is significant political will to boost the Indo-Swedish climate action partnership, an unfortunate knowledge deficit affects the prospects for cooperation. The findings of the above survey highlight a number of implications for Swedish and European stakeholders

April 2018,

https://www.government.se/statements/2018/04/swe den-india-joint-action-plan-agreed-by-primeminister-stefan-lofven-and-prime-minister-narendramodi/ (accessed February 16, 2021). ⁶⁰ The dialogue is available on YouTube, see https://www.youtube.com/watch?v=mQf_haBgaDQ.



seeking closer climate cooperation with India.

First and foremost, Sweden and the EU must note that India is seeking global leadership through its climate agenda. India's climate action agenda will have consequences not only for India's own green modernization efforts, but also for the international community's response to climate change and preparedness for climate risks. Diplomatic cooperation on climate change might not always be smooth. In fact, climate change has historically been considered a "major irritant" in the EU-India relationship.61 Nonetheless, the survey underlines that the EU has a positive reputation among Indian climate experts, and there is therefore a solid foundation to build on. Indeed, Brussels is currently seeking convergence with India on a number of climate-related issues.62

Active Indian climate diplomacy beyond the UNFCCC negotiations would allow Sweden and the EU to engage with India on climaterelated issues in a multitude of formats. The EU-wide partnership with the India-led ISA and the EU's decision to join the CDRI send crucial signals that the EU is seeking to positively engage with India on climaterelated issues. To Sweden, its upcoming ISA membership is an essential opportunity to

⁶¹ Jain, Rajendra K. 2009. India and the European Union: Perceptions and Policies, Paper presented at the European studies in Asia (ESiA) Network Public Panel, Asia-Europe Institute, University of Malaysia, Kuala Lumpur, 19 June 2009, 1–5.

⁶² Timmermans, Frans. "On climate and green transition, the areas of India-EU convergence", Hindustan Times, 14 April 2021, <u>https://www.hindustantimes.com/opinion/on-</u> <u>climate-and-green-transition-the-areas-of-india-eu-</u> push for an accelerated clean energy transition globally. However, Sweden lacks a seat in other essential forums, such as the G20, and must therefore also use the EU track in its climate partnership with India.

The European answer to India's broadly based global climate diplomacy could involve both historical clashes and contemporary alignment. While the 2018 EU Strategy on India outlined alignment with India's broader foreign policy priorities and a distinct priority to engage on climate change, some of the avenues for India's climate diplomacy are likely to involve diplomatic friction. In the WTO, diplomatic relations between the EU and India are strained, not least because of the deadlock over Intellectual Property Rights.⁶³ Given the diplomatic hurdles that still exist, the EU can expect an initial Indian reluctance to engage in regulatory discussions on green growth within the WTO. While historical contestations may be raised within the COP negotiations, practitioners should note that India's signature of the Paris Agreement positions it closer to the EU. As a sign of India and the EU being closer to each other today than ten years ago, contemporary scholarship is calling for joint leadership on climate action by the EU and India.⁶⁴ Concrete proposals on joint leadership

convergence-101618407232076.html (accessed 15 April 2021).

⁶³ For an informative assessment of the climate angle on Intellectual Property Rights, see Ambuj Sagar. 2019. "Managing the Climate Technology Transition" in Dubash, 404.

⁶⁴ Rattani, Vijeta. 2019. "Exploring the EU-India Leadership Dynamic on Climate Change" in Challenges in Europe by Gulshan Sachdeva (ed.). Palgrave Macmillan, 181–196.



opportunities have also been presented.⁶⁵ India's principled climate diplomacy is likely to manifest itself in various conversations, just as the EU's principled climate diplomacy has been boosted by the European Green Deal and diplomatic advocacy of climate neutrality.

As both the EU and the US have a positive reputation in India, it would be prudent to explore the possibilities of trilateral cooperation on climate action in the Indo-Pacific region. Both the EU and the US are members of the India-led CDRI, and the Biden administration insisted that the first Quad Leaders' Summit in March 2021 establish a working group on climate change. As the importance of issue-based coalitions increases, a trilateral climate action track could be a fruitful approach.

At the same time, there is a need for strategic reflection among European and Indian policy planners about the scope of India's and the EU's climate diplomacy. The risk with the survey results is that the epistemic community has overestimated the reality. Nonetheless, the expectation among Indian climate experts of broadly based Indian climate diplomacy is noteworthy.

Despite its global leadership aspirations, India's domestic climate action agenda has not yet experienced massive domestic investment. Instead, the common view among experts is that India's climate action agenda is constrained by the lack of a national budget. Expectations of financial backing from international partners remain high. To accelerate the clean energy transition, the EU could contribute financial support through the European Investment Bank (EIB). An expanded clean energy transition in India will benefit the populations of India and Europe.⁶⁶ An actual presence in and diplomatic outreach to various states across India will be crucial as Indian states have a stake in Indian foreign policy. The EU must engage not only with the national government but also with state governments.

At the same time, the EU must strategically reflect on what joint leadership with India on climate change could mean. Naturally, avoiding the reality of a high emissions-per capita India – as China has developed into – should be a strong incentive for European engagement. The opportunity to jointly shape the global climate discussions in various ways could also attract diplomatic and strategic thinkers. The EU and India can cooperate on climate change both in India and beyond.

Policy recommendations

 Sweden should push for a more ambitious climate partnership between the EU and India.
 Advancing the EU-India Clean Energy and Climate Partnership should be a key priority in the years

⁶⁵ Aspengren, Henrik, and Axel Nordenstam, 2020. "A proposal for coordinated climate action: a multilayered Indo-European opportunity", EU-India Think Tanks Twinning Initiative 2020-2022, <u>https://www.ui.se/globalassets/ui.se-</u>

eng/publications/other-publications/a-proposal-forcoordinated-climate-action_-a-multi-layered-indoeuropean-opportunity.pdf.

⁶⁶ See Aspengren and Nordenstam 2019.



ahead. As the EU implements its European Green Deal and attempts to reduce its dependency on China, India could use the Indo-European climate action partnership to position itself as the prime manufacturing hub of green technologies for European stakeholders. Sweden and India could also actively engage with the EIB and the International Platform for Sustainable Finance on scalingup their financial backing for India's own green modernisation. Ultimately, increased climate cooperation between the EU as a bloc of member states and institutions and India will facilitate the emergence of a low-carbon Indian society and economy.

- Sweden should initiate the formulation of an EU-wide approach to the International Solar Alliance. As Sweden joins the ISA, one of its first tasks should be to formulate a shared European understanding and approach to the Alliance. At the same time as the EU as a bloc of member states and the EIB are signing cooperation deals with the ISA, individual EU member states are joining the ISA at India's encouragement. European unity will not only create predictability within the ISA, but also ensure that the EU speaks with one voice in this new multilateral institution.
- Sweden should advocate for policy planning discussions between the EU and India on climate

cooperation within the G20.

Sweden's forthcoming EU presidency overlaps with India's G20 chairmanship. Swedish and Indian strategic thinkers should ensure that the G20 is used effectively for climate cooperation between the EU and India.

- The EU should scale-up its engagement with the epistemic community on Indian climate policy. India's think tanks and research institutions form a common understanding of Indian climate affairs and thus constitute policy influencers. The EU must connect its own climate policy experts with their Indian counterparts in order to shape a joint climate action agenda.
- India could consider establishing a Climate Diplomacy Division in its Ministry of External Affairs to streamline its global engagements on climate change. As India emerges as a global leader on shaping and deciding on the prerequisites of climate affairs, internal coordination will be pivotal for maximising these diplomatic efforts. Without increased coordination, there is a risk that Indian climate diplomacy will send mixed signals.
- Given India's global climate diplomacy and global leadership ambitions, Sweden and India should together initiate a Global Green Hydrogen Alliance



(GGHA).⁶⁷ With its headquarters in India, an initiating team of Indians and Swedes could jointly formulate an organisational framework. To embrace multilateralism, the new alliance could immediately be connected to the UN system. At the same time, the initiating team should evaluate whether membership of the alliance should be available primarily to UN member states, or whether other stakeholders, such as the business sector, could also join. To encourage European interest, the European Commission should be involved from the beginning and could contribute personnel seconded to GGHA headquarters.

Conclusions

This report has explored India's climate policy experts' perceptions of India's climate policy. The shared understanding generated among Indian climate experts provides a unique insight into the prerequisites for any actor seeking closer climate cooperation with India. The epistemic community of Indian climate policy studied has a favourable view of the EU, which makes climate cooperation a natural pathway for future EU-India relations. At the same time, EU member states will continue to seek bilateral cooperation in areas where there are strong business interests, such as renewable energy. While the intensity of India's bid for global leadership has increased under Modi, India remains a proponent of India's traditional stance in international climate negotiations. The quest for global leadership can therefore be considered a strengthened layer of India's international climate policy. The climate diplomacy pursued in a multiplicity of avenues builds on India's global leadership aspirations. The study therefore confirms the contention of the current Minister of External Affairs, Subrahmanyam Jaishankar, that India has an "enthusiasm for shaping global conversations on climate change".⁶⁸

These dynamic policy developments give rise to at least two separate mindsets for Swedish, European and international stakeholders seeking closer climate cooperation with India. First, a political and strategic mindset on climate cooperation with India, based on a distinct willingness to embrace India as a partner on global issues. Such a forward-looking approach is based on India no longer being a reluctant actor in multilateral climate talks and its embrace of climate multilateralism, as evidenced by the signature and ratification of the Paris Agreement and its co-leadership of the ISA, the CDRI and the Leadership Group for Industry Transition. Ultimately, stakeholders should avoid returning to the foreign aid agenda of the past and treat India as a modern partner on climate change. India's changed approach to become part of the solution rather than a problem facilitates this political approach. Second, a practical, concrete mindset that

⁶⁷ Dr Arunabha Ghosh (CEO and Founder CEEW) deserves the credit for this idea, which he presented at the 3rd Strategic Forum India in November 2020. I

contribute ideas on the structure and organisation of this prospective global alliance. ⁶⁸ Jaishankar, S. 2020: 102.



translates strategic thinking into action. The key here will be to be results-oriented and to formulate attractive offers for Indian stakeholders. While scaling-up climate cooperation with India, Sweden should be aware of the competition between partners seeking India's attention. It is likely that other EU member states will attempt to engage with India on climate action in the future, and that the US, the UK and Japan will also be seeking India's attention. This makes it prudent to engage with India through different tracks, and at the bilateral, Nordic and EU levels.

Nonetheless, policymakers should not just be results-oriented in their approach to climate cooperation with India; they should also be consequence-oriented. Policymakers should not ignore the illiberal reality facing the environmental and climate community on the ground. In addition to demonstrating human rights leadership at home and abroad, the EU must closely monitor the extent to which India's national and state governments are respecting human rights and conforming with India's democratic constitution, as well as how this affects the Indian epistemic climate community.

To seek a deeper understanding of India's climate policy, future research could explore whether there is a single epistemic climate policy community in India or several different epistemic communities. This question is pertinent since there are ten ministries dealing with climate-related issues in India. In addition, to what extent does the Indian climate epistemic community see itself as part of a global climate epistemic community?

Future research could also explore the institutional prerequisites for climate diplomacy in the Indo-Pacific region. The region is highly vulnerable to climate change and larger than India's neighbourhood, so diplomatic initiatives on climate change can be expected. How will different actors and coalitions such as ASEAN, the EU, India, and the Quad address climate cooperation in the Indo-Pacific? How far do their preferences and priorities converge or diverge?



Acknowledgements

The author extends his utmost gratitude to the 25 respondents and five interviewees who generously offered their time and views amid the pandemic. To the 13 experts and officials, as well as Anshika Srivastava, Balakrishna Pisupati, Bipul Chatterjee, Chandrani Sinha, D. Raghunandan, Gagan Nigam, Joydeep Gupta, Kanika Chawla, Parth Bhatia, Prakash Kashwan, Samir Bhattacharya, and Sunil Kumar: thank you! This research would not have been possible without your input. The author would also like to thank UI's internal reviewers for their thoughtful comments and suggestions on earlier drafts of this paper.



Interviews

Interview 1. Author interview with Indian academic, phone, 25 June 2020

Interview 2. Author interview with Swedish diplomat, Embassy of Sweden in New Delhi, 23 October 2020.

Interview 3. Author interview with renewable energy expert, phone, 26 October 2020.

Interview 4. Author interview with Yasmin Zaveri Roy, Senior Advisor, Embassy of Sweden in New Delhi, 28 October 2020.

Interview 5. Author interview with Erik Åstedt, Ministry of Enterprise and Innovation, Government of Sweden, 2 November 2020.



References

ANI. 2019. "Over 130 solar panels installed by India on UN's rooftop: Prakash Javadekar". 25 September 2019, <u>https://energy.economictimes.indiatimes.com/news/renewable/over-130-solar-panels-installed-by-india-on-uns-rooftop-prakash-javadekar/71286064</u> (accessed 3 February 2021).

Aspengren, Henrik, and Axel Nordenstam. 2020. "A proposal for coordinated climate action: a multi-layered Indo-European opportunity", *EU-India Think Tanks Twinning Initiative 2020-2022*, <u>https://www.ui.se/globalassets/ui.se-eng/publications/other-publications/a-proposal-for-</u> coordinated-climate-action_-a-multi-layered-indo-european-opportunity.pdf.

Aspengren, Henrik Chetan, Emil Lidén, and Axel Nordenstam'. 2021. Circles of EU-India engagement: How member states cooperate with India on global issues. *Swedish Institute of International Affairs*. UI Paper no. 1/2021.

Atteridge, Aaron, Manish Kumar Shrivastava, Neha Pahuja, and Himani Upadhyay. 2012. "Climate policy in India: what shapes international, national and state policy?", *Ambio*, 41, 68–77.

Betz, Joachim. 2012. "India's turn in climate policy: assessing the interplay of domestic and international policy change", *German Institute of Global and Area Studies*, GIGA Working Paper no 190, 1–26.

Bhaskar, Utpal. 2020. "India to launch nat'l hydrogen mission", *Mint*, 26 November 2020, <u>https://www.livemint.com/politics/policy/india-to-launch-national-hydrogen-mission-pm-narendra-modi-11606400112499.html</u> (accessed 27 November 2020).

Blom, Annelies G. 2016. "Survey fieldwork". In *The SAGE Handbook of Survey Methodology*, eds. Christof Wolf et al. London: SAGE, 382-397.

BP 2019. Statistical Review of World Energy 2019: 42, https://www.bp.com/content/dam/bp/business-sites/en/global/corporate/pdfs/energyeconomics/statistical-review/bp-stats-review-2019-full-report.pdf (accessed 27 November 2020).

Chakravarty, Akhishek. 2020. Draft EIA notification 2020: Is it contra legem to international conventions, judicial verdicts. *DowntoEarth*,

https://www.downtoearth.org.in/blog/environment/draft-eia-notification-2020-is-it-contralegem-to-international-conventions-judicial-verdicts-73858 (accessed 20 October 2020).

Chatterjee, Kalipada. 2007. "Top news on the environment in Asia: India", *Institute for Global Environmental Strategies*, 34–39.

Chatterjee Miller, Manjari and Kate Sullivan de Estrada. 2018. "Continuity and change in Indian grand strategy: the cases of nuclear non-proliferation and climate change", *India Review*, 17(1), 33–54.



Climate Action Tracker 2020. India: country summary, https://climateactiontracker.org/countries/india/ (accessed 20 October 2020).

Climate Transparency. 2020. *Climate Transparency Report: India*, <u>https://www.climate-</u> <u>transparency.org/wp-content/uploads/2020/11/India-CT-2020-WEB.pdf</u> (accessed 2 February 2021).

Economic Times. 2020. Time for India's net zero target. ET Editorials, <u>https://economictimes.indiatimes.com/blogs/et-editorials/time-for-indias-net-zero-target/</u> (accessed 15 December 2020).

Carius, Alexander, Noah Gordon, and Lauren Risi. 2020. "21st century diplomacy: Foreign policy is climate policy". *Wilson Center and Adelphi*, <u>https://www.wilsoncenter.org/sites/default/files/media/uploads/documents/21st_century_diplomacy_report_spread.pdf</u> (accessed 2 February 2021).

Carrington, Damian. 2010. "IPCC admit mistake over melting Himalayan glaciers", *The Guardian*. 20 January 2010, <u>https://www.theguardian.com/environment/2010/jan/20/ipcc-himalayan-glaciers-mistake</u> (accessed 16 March 2021).

Dubash, Navroz. 2021. Should India consider a net-zero pledge? *Centre for Policy Research*, <u>https://environmentality.cprindia.org/net-zero/should-india-consider-a-net-zero-pledge</u> (accessed 12 February 2021).

Dubash, Navroz K. 2013. 'The politics of climate change in India: narratives of equity and cobenefits', *WIRE Climate Change*, 4, 191-201.

Dubash and Ghosh 2019. 'National Climate Policies and Institutions'. In *India in a Warming World: Integrating Climate Change and Development,* ed. Navroz K. Dubash. New Delhi: Oxford University Press, pp. 329–348.

Dubash, Navroz and Radhika Khosla. 2015. "Neither brake nor accelerator: Assessing India's climate contribution", *Economic & Political Weekly*, 17 October 2015, https://www.researchgate.net/profile/Radhika_Khosla/publication/284746901_Neither_brake_n or_accelerator_Assessing_India's_climate_contribution/links/569e399908aed27a703275f2/Neither_brake-nor-accelerator-Assessing-Indias-climate-contribution.pdf (accessed 20 November 2021).

Dunlop, Claire A. 2013. "Chapter 18: Epistemic communities", in *Routledge Handbook of Public Policy* eds. Eduardo Araral Jr. et al. London: Routledge, pp. 229-243.

Geden, Oliver and Felix Schenuit. 2019. "Climate neutrality as long-term strategy: the EU's net zero target and its consequences for member states". *SWP Comment*, 33, August 2019, <u>https://www.swp-</u>

berlin.org/fileadmin/contents/products/comments/2019C33 Gdn Schenuit.pdf (accessed 2021-02-23).



Haas, Peter M. 1992. "Introduction: epistemic communities and international policy coordination", International Organization, 46(1), 1–35.

Hall, Ian. 2019. Modi and the Reinvention of Indian Foreign Policy. Bristol: Bristol University Press.

Hakala, Emma. 2019. "India and the global geoeconomics of climate change: Gains from cooperation?" *ORF Issue Brief* no. 291, Observer Research Foundation, pp. 1–12.

Government Offices of Sweden. 2018. "Sweden-India Joint Action Plan, agreed by Prime Minister Stefan Löfven and Prime Minister Narendra Modi", 17 April 2018, <u>https://www.government.se/statements/2018/04/sweden-india-joint-action-plan-agreed-by-prime-minister-stefan-lofven-and-prime-minister-narendra-modi/</u> (accessed 15 February 2021).

International Energy Agency. 2021. "India and the IEA enter new phase of closer collaboration with signing of Strategic Partnership Framework". 27 January 2021, <u>https://www.iea.org/news/india-and-the-iea-enter-new-phase-of-closer-collaboration-with-signing-of-strategic-partnership-framework</u> (accessed 3 February 2021).

— 2018. "India 175 GW renewable energy target for 2022", <u>https://www.iea.org/policies/6466-india-175-gw-renewable-energy-target-for-2022?country=India&page=3</u> (accessed 15 February 2021).

— 2017. India joins IEA family: A major milestone for global energy governance. 30 March 2017, <u>https://www.iea.org/news/india-joins-iea-family-a-major-milestone-for-global-energy-governance</u> (accessed 3 February 2021).

Jain, Rajendra K. 2009. "India and the European Union: Perceptions and policies". Paper presented at the European studies in Asia (ESiA) Network Public Panel, Asia-Europe Institute, University of Malaysia, Kuala Lumpur, 19 June 2009, 1–5.

Jaishankar, Dhruva. 2019a. Survey of India's strategic community. Brookings India, <u>https://www.brookings.edu/wp-content/uploads/2019/03/Survey-of-India%E2%80%99s-</u> <u>Strategic-Community.pdf.</u>

— 2019b. "Acting East: India in the Indo-Pacific". *Brookings India Impact Series* 102019-02, October 2019, *Brookings Institution India Center*, <u>https://www.brookings.edu/wp-</u> content/uploads/2019/10/Acting-East-India-in-the-INDO-PACIFIC-.pdf.

Jaishankar, Subrahmanyam. 2020. *The India Way: Strategies for an Uncertain World*. Noida: HarperCollins.

Joshi, Madhura and Han Chen. 2020. "The road from Paris: India's progress towards its climate pledge", *National Resources Defense Council, Issue Brief*, 1–15, <u>https://www.nrdc.org/sites/default/files/road-from-paris-202009.pdf</u>.

Jörgensen, Kirsten, Arabinda Mishra and Gopal K. Sarangi. 2015. "Multi-level climate governance in India: The role of the states in climate action planning and renewable energies", *Journal of Integrative Environmental Sciences*, 12(4), 267–283.



Lavasa, Ashok 2019. "Reaching agreement in Paris: A negotiator's perspective". In *India in a Warming World* ed. Navroz Dubash. New Delhi: Oxford University Press.

Mathur, Akshay. 2019. "Preparing India for the G20 presidency in 2022". *Gateway House*, <u>https://www.gatewayhouse.in/india-g20-presidency/</u> (accessed 3 February 2021).

Ministry of External Affairs. 2021. Joint Statement on India-Sweden Virtual Summit, 5 March 2021, <u>https://www.mea.gov.in/bilateral-</u>

<u>documents.htm?dtl/33592/Joint+Statement+on+IndiaSweden+Virtual+Summit</u> (accessed 9 March 2021).

— 2015. "Remarks by Foreign Secretary at the release of Dr C. Raja Mohan's book 'Modi's world: Expanding India's Spheres of Influence''' (July 17, 2015)". 18 July 2015, <u>https://mea.gov.in/Speeches-</u>

<u>Statements.htm?dtl/25491/Remarks+by+Foreign+Secretary+at+the+release+of+Dr+C+Raja+Mo</u> <u>hans+book+Modis+WorldExpanding+Indias+Sphere+of+InfuencequotJuly+17+2015</u>

Ministry of Foreign Affairs 2021. Statement on Foreign Policy 2021, <u>https://www.government.se/492a59/contentassets/51c9f38eca39475597ffbde6430edfc8/statem</u> <u>ent-of-government-policy.pdf (accessed 24</u> February 2021).

— 2020. Statement on Foreign Policy 2020, <u>https://www.government.se/4914f9/contentassets/60b51f6b598a4874bbfb3b0074d48ad8/utrike</u> <u>sdeklarationen2020_eng.pdf</u> (Assessed 24 February 2021).

Mitra et al. 2015. "Five key takeaways from India's New Climate Plan (INDC)", *World Resources Institute*. 2 October 2015, <u>https://www.wri.org/blog/2015/10/5-key-takeaways-india-s-new-climate-plan-indc.</u>

Mohan, Vishwa. 2018. "ISA could replace OPEC as key global energy supplier in future: PM Modi", *Times of India*, 3 October 2018, <u>https://timesofindia.indiatimes.com/india/isa-could-replace-opec-as-key-global-energy-supplier-in-future-pm-modi/articleshow/66044985.cms.</u>

Niti Aayog. 2018. Strategy for New India @75. November 2018, 107, http://niti.gov.in/sites/default/files/2019-01/Strategy_for_New_India_2.pdf.

Rajamani, Lavanya. 2009. 'India and climate change: What India wants, needs, and needs to do', *India Review*, 8(3), 340–374.

Rastogi, Namrata Patodia. 2011. "Wind of change: India's emerging climate strategy", *The International Spectator*, 46(2), 127–141.

Roy, Rathin. 2020. "Decolonising climate action". *Business Standard*, 3 December 2020, <u>https://drive.google.com/file/d/1BeXKox_ooFqnf2xFr4D9_6OQ86ICjC/view</u> (Assessed 3 December 2020).



Rattani, Vijeta. 2018. Coping with climate change: An analysis of India's National Action Plan on Climate Change, *Centre for Science and Environment*, New Delhi, <u>http://www.indiaenvironmentportal.org.in/files/file/coping-climate-change-NAPCC.pdf</u>.

Sengupta, Sandeep. 2019. "India's engagement in global climate negotiations from Rio to Paris". In *India in a Warming World*, ed. Nazroz Dubash, pp. 114–141.

Saran, Shyam. 2017. How India Sees the World. New Delhi: Juggernaut.

Shringla, Harsh V. 2021. "Moving beyond Paris: India steps up its climate ambitions", Reuters. 21 January 2021, <u>https://news.trust.org/item/20210121095650-7f4b9</u>.

Sinha, Jayant. 2021. "India's search for greener pastures should end in a climate change law", *Economic Times*, 10 March 2021,

https://economictimes.indiatimes.com/news/economy/policy/view-indias-search-for-greenerpastures-should-end-in-a-climate-change-law/articleshow/81436498.cms (accessed 15 March 2021).

Special Correspondent. 2017. "Climate change plan to get new missions", *The Hindu*, 25 January 2017, <u>https://www.thehindu.com/news/national/Climate-change-plan-to-get-new-missions/article17090498.ece.</u>

Timmermans, Frans. "On climate and green transition: The areas of India-EU convergence", *Hindustan Times*, 14 April 2021, <u>https://www.hindustantimes.com/opinion/on-climate-and-green-transition-the-areas-of-india-eu-convergence-101618407232076.html</u> (accessed 15 April 2021).

Tse-Hua Shih and Xitao Fan. 2012. 'Comparing response rates from web and mail surveys: A meta-analysis'. In *SAGE Internet Research Methods*, ed. Jason Hughes. London: SAGE.

Power for All. 2019. *Powering Jobs Census 2019: The Energy Access Workforce*, <u>https://www.powerforall.org/resources/reports/powering-jobs-census-2019-energy-access-workforce</u>.

Press Trust of India. 2019. "Govt may set up National Coastal Mission to address climate change impact", *Business Standard*, 19 November 2019, <u>https://www.business-standard.com/article/pti-stories/centre-mulling-setting-up-national-coastal-mission-under-napcc-javadekar-119112901386_1.html.</u>

United Nations Office for Disaster Risk Reduction. 2019. "UNDRR welcomes India's launch of the global Coalition for Disaster Resilient Infrastructure", 24 September 2019, <u>https://www.undrr.org/news/undrr-welcomes-indias-launch-global-coalition-disaster-resilient-infrastructure</u> (accessed 3 February 2021).



About UI

Established in 1938, the Swedish Institute of International Affairs (UI) is an independent research institute on foreign affairs and international relations. Any views expressed in this publication are those of the author. They should not be interpreted as reflecting the views of the Swedish Institute of International Affairs. All manuscripts are reviewed by at least two other experts in the field. Copyright of this publication is held by UI. You may not copy, reproduce, republish or circulate in any way the content of this publication except for your own personal and noncommercial use. Any other use requires the prior written consent of UI.

...

....

•••••