Exploring the nexus of renewable energy and international investment law in India: Opportunities and issues

Author: Harsh Manohar, Lecturer, Jindal Global Law School, Sonipat, India [0009-0005-0270-6407]

Recommended Citation:

Manohar, H. Exploring the nexus of renewable energy and international investment law in India: Opportunities and issues. *Jindal Global Law Review* 15, 635–670 (2024). https://doi.org/10.1007/s41020-024-00239-x

Exploring the nexus of renewable energy and international investment law in India: Opportunities and issues

Abstract

This paper examines the complex nexus between Renewable Energy and International Investment Law in India. The analysis starts with a discussion on climate finance and its role in climate mitigation. Given the limited public finance, this paper examines the central role of private climate finance and the role of International Investment Law in stimulating private finance. Focusing on the role of International Investment Law in protecting and promoting private investment, India's past experience with investment disputes is discussed. Reflecting on India's shifting stance on International Investment Law, the focus moves to India's investment climate for Renewable Energy projects. This paper argues that substantial steps are necessary for India to adequately contribute to the global climate crisis. While Investor-State Dispute Settlement and International Investment Law may contribute to this lack of climate finance, this 'solution' is not without its issues. Any discussion on the Investor-State Dispute Settlement's role must be multifaceted and give sufficient weight to the political and economic costs inherent in its form and substance.

This paper is purposefully descriptive and takes a neutral stance on Investor-State Dispute Settlement and International Investment Law. Ultimately, recommendations for further research are explored. These topics have already been the subject of numerous articles; however, they usually fall under two dominant narratives: pro or anti-ISDS (Investor-State Dispute Settlement). Therefore, this paper seeks to invite and facilitate contributions from diverse voices on this complex interaction.

Keywords: Global climate crises, Climate mitigation, Climate adaptation, International Investment Law, Climate Finance

1 Introduction

The global climate crisis, arguably the most pressing challenge of the 21st century, is no longer a speculative projection for a distant future but an unsettling reality of our present era.[1] It is widely recognised that the climate crisis requires quick and decisive action.[2] These actions can be in two forms: climate adaptation and climate mitigation. Climate adaptation refers to the strategies, actions, and processes implemented to cope with the actual and anticipated changes in climate. It seeks to reduce the vulnerability of ecological, social, and economic systems to the adverse effects of climate change. The primary aim is to enhance resilience and minimise harm.[3] Climate mitigation refers to the efforts made to reduce or prevent the emission of greenhouse gases or improve the means to remove these gases from the atmosphere. It primarily focuses on the causes of climate change rather than its impacts. By tackling the sources or enhancing the sinks of greenhouse gases, mitigation strategies attempt to limit the extent of global warming and, in the process, reduce the scope and scale of its impacts.[4] This paper looks specifically at India. India is

[1] 'Climate Crisis: Race We Can Win' (*United Nations*, 2020). https://www.un.org/en/un75/climate-crisis-race-we-can-win. Accessed 10 November 2024.

[2] European Trade Union Confederation, *Climate Action Call* (2019). https://www.etuc.org/sites/default/files/document/file/2019-07/Climate%20Action%20Call_CAN%20Europe.pdf. Accessed 12 November 2024; World Economic Forum, *The Net Zero Challenge* (2020). https://www3.weforum.org/docs/WEF_The_Net_Zero_Challenge.pdf. Accessed 10 November 2024.

[3] 'Climate Adaptation' (*United* Nations, 2020). https://www.un.org/en/climatechange/climate-adaptation. Accessed 10 November 2024.

[4] UNFCCC, 'Introduction to Mitigation' (UNFCCC, 2020). https://unfccc.int/topics/introduction-to-mitigation. Accessed 11 November 2024; Paul C Stern et al., 'Feasible Mitigation' 13(1) *Nature Climate Change* 6 (2023).

one of the most vulnerable countries to climate change.[5] According to the XDI survey, India has 9 of the 50 states most vulnerable to climate change in the world.[6] After a brief introduction to climate finance, we will shift our focus to India-specific issues and analysis.

The Paris Agreement's ('PA') overarching goal is to limit global warming to well below 2°C above pre-industrial levels, with efforts to limit the increase to 1.5°C through climate adaptation and mitigation.[7] Achieving this objective necessitates massive financial injections, especially for countries lacking the resources to mitigate the effects of climate change or transition to sustainable energy sources.[8] A foundational element of the PA's financial provisions is Article 9, which delineates the responsibilities and commitments of parties concerning climate finance.[9] Article 9(1) emphasises the need for developed countries to provide financial resources to assist developing countries with mitigation and adaptation. While the text is unequivocal about the obligation of developed nations, it encourages other nations to provide support voluntarily.[10] The provisions for state-to-state or collective (developed states) to another collective (developing

---

[5] 'Gross Domestic Climate Risk' (*XDI*, 2020). https://archive.xdi.systems/xdi-benchmark-gdcr/#:~:text=The%20Gross%20Domestic%20Climate%20Risk,exposure%20of%20the%20built%20environment. Accessed 10 November 2024.
[6] ibid.
[7] 'The Paris Agreement', (*UNFCCC*). https://unfccc.int/process-and-meetings/the-paris-agreement. Accessed 10 November 2024; Daniel Klein et al., (eds), *The Paris Agreement on Climate Change: Analysis and Commentary* (Oxford: Oxford University Press 2017); Robert Falkner, 'The Paris Agreement and the New Logic of International Climate Politics' (2016) 92(5) *International Affairs* 1107; Charlotte Streck, Paul Keenlyside, and Moritz Von Unger, 'The Paris Agreement: A New Beginning' (2016) 13(1) *Journal for European Environmental & Planning Law* 3; Radoslav S Dimitrov, 'The Paris Agreement on Climate Change: Behind Closed Doors' (2016) 16(3) *Global Environmental Politics* 1.
[8] Aidy Halimanjaya, 'Climate Mitigation Finance Across Developing Countries: What are the Major Determinants?' (2015) 15(2) *Climate Policy* 223; Antonina Ivanova et al., 'Climate Mitigation Policies and Actions: Access And Allocation Issues', (2020) 20 *International Environmental Agreements: Politics, Law and Economics* 287; Geoff O'Brien et al., 'Climate Adaptation From a Poverty Perspective', in Bert Metz, M Kok J T (eds), *Development Policy as a Way to Manage Climate Change Risks* (Routledge 2015) 194-201; Benjamin K Sovacool, Björn-Ola Linnér, and Michael E Goodsite, 'The Political Economy of Climate Adaptation' (2015) 5(7) *Nature Climate Change* 616.
[9] Paris Agreement (adopted on 12 December 2014, came into force on 4 November 2016) art 9.
[10] ibid art 9(5).

states) climate finance are practically unenforceable.[11] As pointed out by some critics, the developed nations included this language explicitly to avoid liability.[12]

A numeric target is also embedded in the PA, stemming from prior negotiations at the Conference of the Parties (COP) in Copenhagen and Cancún.[13] The developed countries pledged to mobilize $100 billion annually by 2020, aiming to continue this level of support through 2025.[14] Post-2025, a new, higher goal will be set, drawing from the $100 billion baseline—a goal which has not been achieved even once as of COP28 in 2023.[15]

Beyond mere allocations, the PA underscores the importance of climate finance transparency, predictability, and accountability.[16] Article 9(5) stipulates that developed countries shall biennially communicate indicative projections of their financial contributions, clarifying the source (public or private) and the channel (bilateral, regional, or international).[17] This provision ensures that

---

[11] David Rossati and Alexander Zahar, 'Governing Climate Finance and Investment: The Role of Law', in Micheal Mehling and Harro van Asselt (eds), *Research Handbook on Climate Finance and Investment Law* (Edward Elgar 2022).
[12] ibid.
[13] Decision 2/CP.15, The Copenhagen Accord, FCCC/CP/2009/11/Add.1 (30 March 2010) (Copenhagen Accord) [8–10]; Decision 1/CP.16, The Cancún Agreements: Outcome of the Work of the Ad Hoc Working Group on Long-term Cooperative Action under the Convention, FCCC/CP/2010/7/Add.1 (15 March 2011) (Cancún Agreements) [95–112].
[14] ibid.
[15] Jacob Koshy, 'Pledges Made at the COP28 Climate Talks' (*The Hindu*, 13 December 2023). https://www.thehindu.com/sci-tech/energy-and-environment/pledges-made-at-the-cop28-climate-talks/article67634805.ece#:~:text=The%20two%20weeks%20of%20negotiations,declarations%20committed%20to%20climate%20action&text=COP28%2C%20hosted%20by%20the%20oil,transition%20away%E2%80%9D%20from%20fossil%20fuels. Accessed 10 November 2024; The UNFCCC reports an even lower number stating, 'The Green Climate Fund (GCF) received a boost to its second replenishment with six countries pledging new funding at COP28 with total pledges now standing at a record USD 12.8 billion from 31 countries, with further contributions expected. Eight donor governments announced new commitments to the Least Developed Countries Fund and Special Climate Change Fund, totalling more than USD 174 million to date, while new pledges, totalling nearly USD 188 million so far, were made to the Adaptation Fund at COP28' with no other commitments being reported. 'COP28 Agreement Signals "Beginning of the End" of the Fossil Fuel Era' (*UN Climate Change News*, 13 December 2023). https://unfccc.int/news/cop28-agreement-signals-beginning-of-the-end-of-the-fossil-fuel-era. Accessed 10 November 2024.
[16] Paris Agreement (n 9) art 9(7).
[17] ibid art 9(5).

recipient nations can plan their climate actions effectively and clearly understand available resources.

As with most international agreements, while ambitious, the climate finance goals described at COP 15 and 16 are yet to be achieved. The $100 billion goal only represents a fraction of the climate finance needed for the goals of the PA.[18] The reported figures lack substantial value due to issues in defining and estimating climate finance. Therefore, the reported figures are likely to be inflated and inaccurate.[19] There is an acute lack of climate finance from public sources. As such, private finance must contribute 80-90 per cent of the required finance for the 1.5°C goal.[20]

The lack of climate finance forces developing nations like India to take inadequate climate action. Incentivizing private finance for climate mitigation and adaptation can place a significant burden on the host state. This cost may take various forms to derisk the investment, such as long-term Power Purchase Agreements (PPAs), promises to create a stable and predictable investment environment, and, most significantly, providing access to International Investment Law (IIL). The paper aims to introduce the complex interaction of IIL and climate issues to readers and form the basis for further intellectual enquiry.

To elucidate the interaction between the host state and the investor, this paper will focus on offtaker and political risks inherent in the renewable energy (RE) sector.[21] Offtaker risk involves

---

[18] When referring to the goals of the Paris Agreement (n 9), the paper will mean 1.5°C limit and net zero by 2050. The UNFCCC states speaking of the COP28 pledges, 'these financial pledges are far short of the trillions eventually needed to support developing countries with clean energy transitions, implementing their national climate plans and adaptation efforts.' 'COP28 Agreement Signals "Beginning of the End" of the Fossil Fuel Era' (n 15).

[19] Igor Shishlov and Philipp Censkowsky, 'Same but Different? Understanding Divergent Definitions of and Views on Climate Finance' in Axel Michaelowa and Anne-Kathrin Sacherer (eds), *Handbook of International Climate Finance*, edited by (Edward Elgar 2022) Ch 1.

[20] Prasad Ananthakrishnan et al., 'Emerging Economies Need Much More Private Financing for Climate Transition' (*IMF Blog*, 2 October 2023). https://www.imf.org/en/Blogs/Articles/2023/10/02/emerging-economies-need-much-more-private-financing-for-climate-transition. Accessed 10 November 2024.

[21] Offtaker here refers to the counterparty in the PPA. Mostly State Electricity Distribution companies.

curtailment risk and payment risk; the former is a restriction on optimal Plant Load Factor (PLF), while the latter is risk associated with timely payment by the offtaker.[22] Political risk includes the overarching threat of expropriation, nationalisation, non-convertibility, a ban on the transfer of funds, and changes to the regulatory environment or agreements between the host states and the investor.[23]

Offtaker risks are usually dealt with in the larger domestic climate law framework, and IIL typically deals with political risks in case of foreign investments. IIL provides important standards of protection against political risk, ensures that the instruments alleviating offtaker risks are honoured and provides a *neutral* dispute resolution mechanism.[24] This paper will discuss these standards and the dispute resolution mechanism in detail.[25] Therefore, a possible synergy exists between climate law and IIL regarding investments in RE projects.[26] In straightforward terms, while climate law and related policy give incentives, IIL provides the stability and predictability of these incentives for the long term, ensuring that the rug is not pulled from underneath the investors after they have invested. India's unique position as a rapidly growing economy and a key player in global climate change mitigation efforts, along with an ambiguous position on IIL, offers a fascinating case study for examining the dynamic interplay between IIL and climate finance. India's position on IIL has shifted from offering Investor-State Dispute Settlement (ISDS) under

[22] For further information on India's mitigation law and current investment protection, refer to Part 3 of this paper.
[23] For further information on International investment law, climate and India, refer to Part 2 of this paper.
[24] Emphasis added. *See* generally Rudolf Dolzer, Ursula Kriebaum, and Christoph Schreuer, *Principles of International Investment Law* (Oxford: Oxford University Press 2022).
[25] See Part 2 of this paper.
[26] Anatole Boute, 'The Potential Contribution of International Investment Protection Law to Combat Climate Change' (2009) 27 *Journal of Energy & Natural Resources Law* 333; Crina Baltag and Ylli Dautaj, 'Investors, States, and Arbitrators in the Crosshairs of International Investment Law and Environmental Protection' (2020) 3(1) *Brill Research Perspectives in International Investment Law and Arbitration* 1; Flavia Marisi, *Environmental Interests in Investment Arbitration: Challenges and Directions* (The Hague: Kluwer Law International 2020).

IIL to terminating most of its treaties in 2017 to again negotiating investment treaties.[27] As of the time of writing this paper, India does not provide treaty protection under IIL to foreign investors.[28] One exception is the recent signing of the India-UAE BIT (2024).[29] No information on the substantive and procedural aspects of the treaty is publicly available, and the treaty is currently not in force.

This paper starts with a discussion on climate finance reporting, highlighting the lack of climate finance in India and the need for private finance to fill the gap. Part 2 starts with a background on IIL and elaborates upon India's experience along with the features of IIL with the Dabhol Case study. Part 3 describes the issues with the current climate incentive regime and its impact on the predictability and stability of the RE investment environment in India.[30] Part 4 concludes and recommends areas of further research.

2 Climate finance: Definitions, trends, and reflections

[27] See generally Prabhash Ranjan, *India and Bilateral Investment Treaties: Refusal, Acceptance, Backlash* (Oxford: Oxford University Press 2018). IIL and ISDS are closely related. IIL comprises a network of treaties and agreements that govern international investment, focusing on protecting investors' rights and ensuring fair treatment. ISDS is a mechanism within this legal framework, allowing investors to directly sue states for alleged violations of IIL. This system provides a way for investors to resolve disputes with host states outside of the host state's domestic court system, typically through international arbitration. ISDS plays a crucial role in enforcing the standards and obligations set out in IIL.

[28] However, many news reports state that India may sign a BIT with UK and the EU as part of its larger FTA negotiations. Ravi Dutta Mishra and Gulveen Aulakh, 'India May Junk 2016 Model for Bilateral Investment Treaties with UK, EU' (*The Mint*, 27 August 2023). https://www.livemint.com/news/india/india-may-revise-bilateral-investment-treaty-template-amidst-negotiations-for-free-trade-agreements-with-uk-and-eu-11693155107441.html. Accessed 10 November 2024.

[29] 'International Investment Agreements Navigator, India-United Arab Emirates BIT (2024)' (*UNCTAD: Investment Policy Hub*). https://investmentpolicy.unctad.org/international-investment-agreements/treaties/bilateral-investment-treaties/5119/india---united-arab-emirates-bit-2024-. Accessed 10 November 2024.

[30] The current regime is different from the past as India terminated most of its investment treaties in 2017. As such India no longer offers a path to Investor-State Dispute Resolution under IIL.

Climate finance is integral to the global response to climate change. The PA underscores the commitment of developed countries to support developing nations by mobilising finance. Specifically, it calls for developed countries to continue taking the lead in mobilising climate finance from various sources, aiming to achieve a balance between mitigation (emissions reduction) and adaptation (building resilience to climate impacts).[31] The PA also acknowledges the need for transparency in providing and mobilising this support. A central element of this financial commitment is the pledge by developed countries to mobilise USD100 billion annually by 2020 to support climate action in developing countries. This target has been a focal point of discussions regarding its achievement and future enhancement.[32] The first sub-section underscores the issues in defining climate finance, which will be followed up by trends in climate finance. This section aims to emphasise the gap in climate finance and the role of private finance in filling that gap.

1.1. Defining climate finance

Defining climate finance with any authority has been challenging, with many organizations, banks and NGOs using different definitions. The variability affects estimates of overall finance flows and the impact of finance from different sources. International institutions have operational definitions of climate finance, which are generally in line with the definition used by UNFCCC, which states, 'climate finance aims at reducing emissions and enhancing sinks of greenhouse gases

[31] Paris Agreement (n 9) art 9.

[32] Amar Bhattacharya et al., *Delivering on The $100 Billion Climate Finance Commitment And Transforming Climate Finance* (Independent Expert Group On Climate Finance, December 2020). https://www.un.org/sites/un2.un.org/files/2020/12/100_billion_climate_finance_report.pdf. Accessed 10 November 2024.

and aims at reducing vulnerability of, and maintaining and increasing the resilience of, human and ecological systems to negative climate change impact.'[33]

The Organisation for Economic Cooperation and Development—Development Assistance Committee (OECD-DAC) database provides a detailed 'picture of climate-related development finance flows', encompassing bilateral, multilateral, and private finance mobilised 'through official interventions'.[34] The database allows viewing these flows from both the recipient and provider perspectives, thus offering a comprehensive understanding of climate finance dynamics.

In 2014, the OECD-DAC modernised its reporting on loans in statistics by introducing a grant-equivalent basis measurement for donor effort in Official Development Assistance (ODA). This framework aims to ensure data comparability across providers and incentivise allocating concessional resources for implementing the Sustainable Development Goals (SDGs). Although 'climate-related development finance is currently published based on commitments only'.[35] Calculating finance flows from commitments only is problematic, as the UFCCC BA report stated that only 35 per cent of the commitments have been dispersed until 2017.[36] Multilateral Development Banks (MDBs) have been 'jointly reporting on their mitigation and adaptation

---

[33] *Biennial Assessment and Overview of Climate Finance Flows Report* (UNFCCC Standing Committee on Finance, 2014). https://unfccc.int/files/cooperation_and_support/financial_mechanism/standing_committee/application/pdf/2014_biennial_assessment_and_overview_of_climate_finance_flows_report_web.pdf. Accessed 12 November 2024.
[34] *Biennial Assessment and Overview of Climate Finance Flows Report* (UNFCCC Standing Committee on Finance, 2018). https://unfccc.int/sites/default/files/resource/2018%20BA%20Technical%20Report%20Final%20Feb%202019.pdf. Accessed 12 November 2024. 25.
[35] ibid 26.
[36] ibid Figure 3.4, 90.

finance activities'.[37] These reports detail financial commitments by MDBs to climate change projects, including a range of financial instruments. This reporting is based on ex-ante estimations at the time of project approval. Again, this definition does not accurately represent how much finance has actually been dispersed.

The International Development Finance Club (IDFC) reports green finance flows from Development Finance Institutions (DFIs) in both OECD and non-OECD countries.[38] Despite the lack of standardised reporting guidelines, IDFC follows agreed-upon 'common principles for climate mitigation finance tracking' and adaptation activities.[39] The IDFC Green Finance Mapping Report, published annually, provides aggregated data by instrument type, region, and sector, adhering to a global definition of mitigation and adaptation projects.[40]

The difficulty in reaching a consensus on a singular definition is partly due to the different approaches of governments, international organisations, and think tanks. These varying definitions reflect climate finance's complex and evolving nature and the challenges in standardising its understanding across different entities. These definitions also represent the heart of the challenge. If we do not have a consensus on the definition, how can we measure the financial flows? If we cannot measure the financial flows accurately, how do we know if the developed countries are fulfilling their obligations?

The technical nature of recommending a definition of climate finance is beyond the scope of this paper. For this paper's purposes, the scope of finance, facilitated through investment treaties, is

[37] ibid.
[38] ibid 27.
[39] See generally European Investment Bank et al., *Common Principles for Climate Mitigation Finance Tracking* (Version 4 –5 December 2023, 5 December 2023). https://www.eib.org/attachments/documents/mdb_idfc_mitigation_common_principles_en.pdf. Accessed 10 November 2024.
[40] 'Green Finance Mapping' (*IDFC*). https://www.idfc.org/green-finance-mapping/. Accessed 10 November 20.

covered by all definitions. It is covered under both 'transboundary flows of finance triggered by public interventions,'[41] a narrow definition adopted by the editors of the Handbook of International Climate Finance[42] and the more inclusive definitions that include in-country finance for mitigation and adaptation, along with various forms of private finance such as one adopted by the UNFCCC.[43]

1.2. *Trends in Climate Finance*

In terms of trends, climate finance has seen significant growth, particularly in recent years. The average annual climate finance flows nearly doubled from 2019/2020 to 2021/2022, reaching approximately USD 1.3 trillion.[44] Given the issue with definition, these numbers have to be taken with a pinch of salt and arguably do not accurately describe the availability of finance for developing nations. As Shishlov and Censkowsky observe, defining and quantifying climate finance remains a contentious issue, primarily due to the absence of a universally accepted definition and standard accounting practices.[45] This ambiguity has led to vastly differing estimates of progress towards climate finance goals. They use the example of a notable discrepancy post-PA in 2015 between the OECD and the Indian Ministry of Finance.[46] While the OECD's 2015 report claimed that developed countries had provided USD 57 billion in climate finance to developing nations for the year 2013–14, the Indian Ministry of Finance reported a significantly lower figure of just USD 2.2 billion, critiquing the OECD's report as 'deeply flawed'.[47] This 'staggering 26-

[41] With the bilateral treaty itself being the public intervention on both sides.
[42] Michaelowa and Sacherer (eds), *International Climate Finance* (n 19) 2.
[43] 'Introduction to Climate Finance' (*UNFCCC*). https://unfccc.int/topics/introduction-to-climate-finance. Accessed 14 November 2024.
[44] Barbara Buchner et al., *Global Landscape of Climate Finance 2023* (Climate Policy Initiative, November 2023). https://www.climatepolicyinitiative.org/wp-content/uploads/2023/11/Global-Landscape-of-Climate-Finance-2023.pdf. Accessed 10 November 2024. 2.
[45] Shishlov and Censkowsky, 'Same but Different?' (n 19).
[46] ibid at 17.
[47] ibid.

fold difference' between the OECD and Indian estimates underscores not only the challenges in establishing a global consensus on climate finance definitions and methodologies but also highlights the divergent perspectives of developed and developing countries regarding climate finance.[48]

Furthermore, Shishlov and Censkowsky point out that the criticism of the way climate finance is accounted for extends beyond governmental disputes.[49] Various non-governmental organisations, such as Oxfam, have also challenged the official figures. Oxfam's Climate Finance Shadow Report argues that the actual value of international climate finance is substantially lower than reported by donor countries to the OECD, perhaps only one-third of the reported amounts.[50] A key concern raised by Oxfam is the classification of loans, particularly non-concessional ones, as climate finance.[51] They advocate for counting only the grant-equivalent value of these loans. Additional complexities include the allocation of funds (whether for projects, policies, or studies) and the distinction between climate finance and broader development finance.[52] These myriad issues, coupled with the admission by developing countries that they have not yet fulfilled their commitment to mobilise USD 100 billion annually in climate finance, as acknowledged at the United Kindgom (UK) COP26 Presidency in 2021, have significantly eroded trust in the processes governing international climate finance.[53]

COP28, held in Dubai, once again highlighted these unfulfilled commitments. Three years after the commitment to mobilise USD100 billion per year, the conference was only able to secure

---

[48] ibid.
[49] ibid.
[50] ibid.
[51] ibid.
[52] ibid.
[53] Amar Bhattacharya et al., *Delivering on The $100 Billion Climate Finance Commitment And Transforming Climate Finance* (n 32).

pledges worth USD83 billion.[54] Apart from this, COP28 also fell short in its handling of fossil fuels in the final agreement. The exclusion of explicit language to phase out fossil fuels from the draft text, prepared by the COP28 presidency of the United Arab Emirates, met with significant opposition. The text's call for a reduction in the consumption and production of fossil fuels fell short of the demands for more definitive action against the primary contributors to climate change. This led to a pushback from various nations and organisations, emphasising the urgency of the climate crisis.

Despite the challenges, COP28 concluded with a 'commitment' to transition away from fossil fuels, marking a first in UN climate conferences.[55] However, the agreement did not explicitly call for the phaseout of oil, coal, and gas, which disappointed many advocates and vulnerable countries.[56] COP28 illuminated the ambitious but insincere promise of Common But Differentiated Responsibilities ('CBDR') by the developed countries. Despite the challenges related to definitions, methodologies, and reporting in the realm of international climate finance, there is widespread agreement on one critical issue: the acute shortage of climate finance for developing and emerging economies. This is where the proponents of IIL see its value, particularly in its potential to mobilise private finance.

1.3. *Overview of India: Gaps in finance and insufficient Nationally Determined Contributions*

[54] *Biennial Assessment and Overview of Climate Finance Flows Report* (2018) (n 34) suggests that only one-third of this number is likely to be dispersed in the future; Koshy, 'Pledges Made at the COP28 Climate talks' (n 15).
[55] Tegan Blaine, 'COP28: Transitioning Away from Fossil Fuels to No Deal Phase-Out' (*United States Institute of Peace*, 14 December 2023). https://www.usip.org/publications/2023/12/cop28-transitioning-away-fossil-fuels-no-deal-phase-out. Accessed 10 November 2024.
[56] 'Nations at COP28 in Dubai Agree to Phase Out Use of Oil, Coal and Gas' (*UN News*, 13 December 2023). https://news.un.org/en/story/2023/12/1144742. Accessed 10 November 2024.

The previous two sub-sections highlighted the global issues that concern climate finance. Even the most generous estimates and future pledges fall short of the required finance for the 1.5°C goal.[57] However, numbers do not adequately represent the lack of action that inadequate climate finance represents. Adequacy of climate finance is essential for a country like India, which is not only developing at a rapid rate but also at a massive scale. Without adequate funding for mitigation and adaptation efforts, the GHG emissions in India will continue to rise beyond 2030. As of the end of 2023, India's Nationally Determined Contributions (NDCs) and the goal of Net-Zero by 2070 do not align with the 1.5C goal.[58] This linkage shows how a lack of climate finance can be directly linked with inadequate climate goals and action.

The National Energy Plan 2022 (NEP) indicates that India's peak electricity demand and energy requirement are expected to reach 277.2 Giga Watt (GW) and 1907.8 Billion Units (BU) by 2026-27 and further increase to 366.4 GW and 2473.8 BU by 2031-32.[59] These forecasts, based on the 20th Electric Power Survey, account for variables like electric vehicle adoption, solar rooftop installations, green hydrogen production, and other schemes.[60] For 2026-27, the projected total power capacity is 609,591 MW, including 273,038 MW from conventional sources (coal, gas, nuclear) and 336,553 MW from renewables (hydro, solar, wind, biomass, pump storage plants) plus a significant battery energy storage system (BESS) capacity of 38,564 MW/201,500 MWh.[61] By 2031-32, the capacity is estimated to surge to 900,422 MW, including 304,147 MW from

---

[57] Buchner et al., *Global Landscape of Climate Finance* (n 44).

[58] 'India: Country Summary' (*Climate Action Tracker*). https://climateactiontracker.org/countries/india/. Accessed 10 November 2024.

[59] Central Electricity Authority, *National Energy Plan* (Volume 1, Ministry of Power 2022). https://cea.nic.in/wp-content/uploads/notification/2023/06/NEP_2022_32_FINAL_GAZETTE_English.pdf. Accessed 10 November 2024. lxi- lxii.

[60] Central Electricity Authority, *20th Electric Power Survey of India Report* (Volume 1, November 2022).https://cea.nic.in/wp-content/uploads/notification/2022/11/20th_EPS____Report___Final___16.11.2022.pdf. Accessed 14 November 2024.

[61] ibid.

conventional sources (coal, gas, nuclear) and 596,275 MW from renewables (hydro, solar, wind, biomass, pump storage plants) plus a BESS capacity of 47,244MW/236,220MWh.[62]

This aligns with India's goal of achieving around 500 GW of non-fossil-based capacity by 2029-30.[63] By 2026-27, non-fossil-based capacity is expected to be 57.4 per cent of the total, rising to 68.4 per cent by 2031-32, a significant increase from 42.5 per cent as of April 2023.[64] Coal power plants' average Plant Load Factor (PLF) is projected to be about 58.4 per cent in 2026-27 for 235.1 GW capacity and 58.7 per cent in 2031-32 for 259.6 GW capacity.[65] The NEP also outlines the need for substantial energy storage: 16.13 GW/82.37 GWh by 2026-27, increasing to 73.93 GW/411.4 GWh by 2031-32, split between pump storage and BESS.[66] Coal demand is estimated at 866.4 million tonnes in 2026-27, rising to 1025.8 million tonnes in 2031-32, with an additional 28.9 million tonnes of imports for plants designed for imported coal.[67] Funding requirements for generation capacity are estimated at Rs. 14,54,188 crores for 2022-2027 and Rs. 19,06,406 crores for 2027-2032, excluding post-2032 project costs.[68]

[62] ibid.
[63] ibid Ch 5: Generation Planning.
[64] ibid lxii: Major Highlights.
[65] ibid.
[66] ibid.
[67] ibid.
[68] ibid.

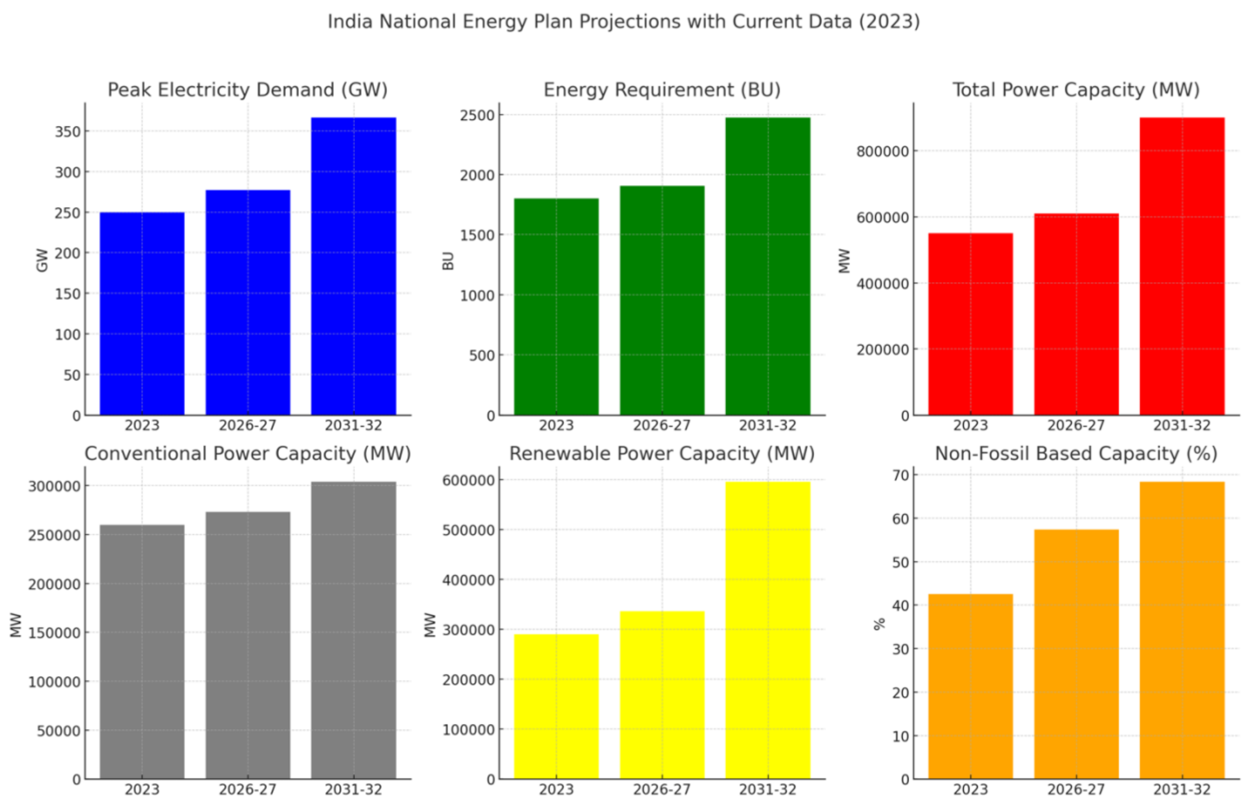

Fig 1: Insert Reference Here.

Climate Tracker, an NGO, rates a country's NDCs in relation to their compliance with the goals of 1.5 and net zero by 2050.[69] Taking the NEP into account and assuming that its targets are achieved, Climate Tracker has rated India's conditional NDC target as 'highly insufficient'.[70] Among other things, the primary driver of this rating is the plan to keep using and adding coal power capacity beyond 2030 and complete non-commitment to the COP28 'agreement' to phase out fossil fuels.[71]

These goals and projections can be extrapolated directly from the availability of climate finance. The NEP states the funding requirement from 2022-2027 as Rs. 14,54,188 crores or approximately

[69] 'India: Country Summary' (n 58).
[70] ibid.
[71] ibid.

USD176.35 billion and Rs. 19,06,406 crores for 2027-2032 or approximately USD231.19 billion in energy alone.[72] Climate Policy Initiative (CPI) reported climate finance to the tune of $44 billion in 2019-2020 in India from domestic and international sources. The amount makes the estimates realistic but also shows that action is limited by finance.[73] In the same report, CPI estimated that India needs about $170 billion per year to achieve its NDCs.[74] While neither estimate can be taken at face value, a four-fold difference in need and funding is quite striking. Therefore, given the current climate finance estimates, it is impossible for India to have more ambitious NDCs and maybe even achieve its *highly insufficient* NDCs.

A joint report by IFC-IEA estimates that India needs about $263 billion per year between 2026 and 2030 and $355 billion per year between 2031-2035 of total blended finance for a 2050 net zero scenario, and 60 per cent of this finance has to come from private sources.[75] This amount of investment is impossible domestically. Therefore, foreign investment is required, especially from private sources. Foreign Direct Investment (FDI) only accounted for USD1.2 Billion of the climate flows in 2019-2020, and therefore also has the most space to grow if given the right incentives.[76] In the context of Emerging and Developing Economies (EMDEs) such as India, a significant challenge lies in the establishment of a clear, supportive, and predictable policy and regulatory environment crucial for expediting energy transitions.[77] This is particularly important when considering the pace and scale necessary to meet climate goals.

---

[72] *National Energy Plan (2022)* (n 59) lxii : Major Highlights.
[73] Jolly Sinha et al,. *Landscape of Green Finance in India* (Climate policy Initiative, 2020). https://www.climatepolicyinitiative.org/wp-content/uploads/2020/09/Landscape-of-Green-Finance-in-India-1-2.pdf. Accessed 10 November 2024. 21
[74] ibid.
[75] IFC-IEA, *Scaling Up Private Finance for Clean Energy in Emerging and Developing Economies* (2023). 58.
[76] Sinha et al,. *Landscape of Green Finance in India* (n 73) 21.
[77] IFC-IEA, *Scaling Up Private Finance for Clean Energy in Emerging and Developing Economies* (n 75).

Critical to the investment landscape in EMDEs like India are governance factors such as political stability, the rule of law, the efficacy of administrative bodies, and access to justice. These are all concerns that IIL can alleviate to a significant degree. These issues will become apparent in Section 2 after the Dabhol Power Plant (DPP) case study and how IIL can give a way out to the investors when these issues arise. Part 3, which discusses the current regulatory environment, will elucidate the issues faced by RE investors without recourse to ISDS.

1.4. *Summary*

This section discusses the primacy of climate finance in adaptation and mitigation efforts. However, there remain a number of different issues with defining and estimating global climate finance flows. Even an optimistic estimate of these flows falls short of what is required to avoid catastrophic climate change.

The focus then shifts to India. The example of India helps in linking the gap in finance to insufficient action. The role of private finance in filling this gap is emphasised, and the challenges that exist, such as political risk, stability and predictability, in mobilising climate finance are discussed in detail in the subsequent Part of this paper. This discussion is supplemented with the role of IIL in dealing with these issues.

2. International investment law, climate and India

The period from the end of World War II to the end of the 20th century saw the proliferation of Bilateral Investment Treaties (BITs), which laid the foundation for modern IIL.[78] The framework was further shaped by the establishment of the International Centre for Settlement of Investment Disputes (ICSID) in 1966, facilitating the arbitration of investment disputes.[79] The larger proliferation of these treaties can be traced to the spread of neo-liberalism and the Washington Consensus.[80] IIL, therefore, champions the free movement of capital.

Today, the ISDS regime is built on the foundation of more than 3000 individual treaties, regarded as the primary source of law on the subject matter.[81] These treaties could be in the form of Bilateral Investment Treaties (BITs), Multilateral Investment Treaties (MITs), and Free Trade Agreements (FTAs) with an investment protection chapter.[82] The proliferation of these treaties, primarily BITs, has led to an exponential increase in the number of disputes filed against host states, from a negligible amount in the early 1990s to over 1257 publicly known treaty claims as of 2023.[83] This exponential increase in cases filed against states and the nature of such claims has made the regime intensely scrutinised.[84]

ISDS is a procedural mechanism that allows foreign investors to directly bring claims against states. ISDS does not refer to a singular place but, as stated earlier, a network of treaties with

---

[78] Zachary Elkins, Andrew T Guzman, and Beth A Simmons, 'Competing for Capital: The Diffusion of Bilateral Investment Treaties, 1960-2000' (2006) 60(4) *International Organization* 811.
[79] Convention on the Settlement of Investment Disputes between States and Nationals of Other States (18 March 1965, 17 U.S.T. 1270, 575 U.N.T.S.) 159; Christoph H Schreuer, *The ICSID Convention: A Commentary* (Cambridge: Cambridge University Press 2009).
[80] World Bank Group, *Legal Framework for the Treatment of Foreign Investment (Volume II): Guidelines* (1 January 1992) 35.
[81] Crina Baltag and Ylli Dautaj, 'Promoting, Regulating, and Enforcing Human Rights Through International Investment Law And ISDS', (2021) 45 *Fordham International Law Journal* 1.
[82] Ylli Dautaj, 'Between Backlash and the Re-Emerging "Calvo Doctrine": Investor-State Dispute Settlement in an Era of Socialism, Protectionism, and Nationalism' (2020) 41 *Northwestern Journal of International Law & Business* 273.
[83] Investment Policy Hub, 'Investment Dispute Settlement Navigator' (*UNCTAD*). https://investmentpolicy.unctad.org/investment-dispute-settlement. Accessed 10 November 2024.
[84] Dautaj, 'Between Backlash and the Re-Emerging "Calvo Doctrine"' (n 82).

widely different scopes, processes and obligations. Entire books and edited volumes have been dedicated to the history, trends, interactions, standard of review, and each standard of protection, among many other elements. As such, it is only possible to introduce some of these elements briefly. This brief introduction will focus on two fundamental standards of protection in IIL, Fair and Equitable Treatment (FET) and Expropriation, along with access to arbitration. This analysis will be coupled with past, present, and future interactions of IIL with energy/renewable energy regulation in India in the coming Parts, which directly affect climate law in India.[85]

2.1. A background to International Investment Law

The primary purpose of IIL is to promote and protect foreign investment.[86] Establishing clear legal frameworks assures investors that their investments will be treated fairly[87] and get the same treatment as domestic[88] and international investors from other nations.[89] The BIT between Australia and India (now terminated) provided in Article 3(1):

> Each Contracting Party shall encourage and promote favourable conditions for investors of the other Contracting Party to make investments in its territory.[90]

---

[85] Energy Law and Climate Law have become increasingly intertwined. Energy regulations invariably affect climate mitigation efforts. Raphael J Heffron and Kim Talus, 'The Development of Energy Law in the 21st Century: A Paradigm Shift?' (2016) 9(3) *The Journal of World Energy Law & Business* 189.

[86] Dolzer, Uriebaum, and Schreuer, *Principles of International Investment Law* (n 24) 134. This work is used throughout to reference concepts under IIL. This book provides a detailed overview and further readings. This also ensures that the reader can refer to one book rather than looking at different papers for every concept. In most cases the citations are omitted, however, only claims supported by case law is used from the book.

[87] ibid 186; Also see Part 2.3.2 of this paper.

[88] Dolzer, Uriebaum, and Schreuer, *Principles of International Investment Law* (n 24) 252.

[89] ibid 263.

[90] Bilateral Investment Treaty between Australia and India (Date of signature: 26/02/1999, Date of termination: 23/03/2017). https://investmentpolicy.unctad.org/international-investment-agreements/treaties/bit/209/australia---india-bit-1999-. Accessed 10 November 2024. art 3(1).

While this encouragement of promoting a favourable climate does not create any substantive obligations on the state,[91] the language could be used to clarify the content and obligations under the FET standard.[92] Therefore, any action by the state that suppresses the amount of investment a foreign investor could make would violate the provisions and the objectives of the treaty.[93] In this way, IIL provides and maintains access for foreign investors into the domestic market of the host states. This access also extends to a right to establish investment into the domestic market of the host state; such a right can be interpreted out of the National Treatment (NT) and Most Favoured Nation (MFN) treatment standard under the investment treaties.[94] NT standard ensures that a foreign investor is treated the same as a domestic investor, while the MFN standard ensures that an investor gets the same treatment as an investor from another nation. These standards restrict discrimination against investors from a particular nation.[95]

Once access has been provided and investment established, the second stage is the protection of investors and investments. This includes protection against direct and indirect expropriation, ensuring FET, and upholding the standard of Full Protection and Security (FPS). The FPS standards provide physical protection to the investor and their investment.[96] Along with the protection of investors, the obligation of favourable conditions also creates predictability and stability in the regulations which govern an investment through the protection of legitimate expectations.[97] In the case of climate mitigation investments, this may mean no unilateral retrospective changes to the Power Purchase Agreements (PPA) and other agreements.[98] While the

---

[91] *White Industries Australia v India*, Final Award, 30 November 2011, [9.1.12, 9.2.1, 9.2.7.]; See also Part 2.3.2 of this paper.
[92] *Nordzucker v Poland*, Second Partial Award, 28 January 2009, [77, 95]; Also see Part 2.3.2 of this paper.
[93] ibid.
[94] Dolzer, Uriebaum, and Schreuer, *Principles of International Investment Law* (n 24) 137.
[95] For NT *see* ibid 252; For MFN see ibid 263.
[96] ibid 230.
[97] For further information see Part 2.3.2 of this paper.
[98] ibid.

obligation of predictability and stability does not mean freezing of regulation unless otherwise agreed, the severity and the duration of change are taken into account when adjudicating a breach of FET.[99]

After the second stage, rights, which to an extent ensures that the investment remains profitable, the third stage is the Transfer of Funds.[100] This right ensures that the investor is able to sell their assets and send profits or monies from a sale back to their home state. Therefore, these three stages, together, ensure market access, market stability, and market exit. These protections 'logically' provide an influx of foreign investment and signal suitable market conditions for investors.[101] If any of these obligations are violated, access to arbitration is provided.[102] Arbitration ensures that an investor gets access to justice while ensuring fairness and neutrality, which cannot be offered by domestic courts of the host state.[103]

In this way, IIL can help spur private investment in climate mitigation and adaptation efforts. The purpose of this Part was to provide a brief background of the IIL regime without going into the nuance. The next sub-section starts with a brief discussion of India's past interaction with IIL and arbitration, the *Dabhol Debacle*.

2.2. India's interaction with IIL: The Dabhol Debacle

[99] ibid.
[100] ibid 290.
[101] Only logically, as empirically, the relationship between treaty protections and FDI is not clear. See ibid 29 footnote 117.
[102] ibid 340.
[103] ibid.

The story of India's interaction with IIL started in the 1990s when India transitioned from a closed economy to a comparatively liberal one.[104] This shift involved significant structural reforms, such as deregulation, effecting full currency convertibility, reducing trade barriers, and encouraging foreign investment in important infrastructure sectors like power, telecommunications, and transport, serving as the welcoming end of the 'License Raj'.[105]

In furtherance of this liberalization, on 14th March 1994, India signed its first BIT with the United Kingdom. This signing was part of India's wider strategy to attract and protect foreign investment. On 6th January 1994, India joined the Multilateral Investment Guarantee Assurance (MIGA), a body of the World Bank Group aimed at encouraging foreign investment in developing countries.[106] From 1994 to 2000, India signed 40 BITs, averaging 6 to 7 per year, with both developed and developing countries.[107] The trend continued from 2001 to 2010, during which India signed BITs with an additional 39 countries.[108]

India's first experience under these treaties arose out of the Dabhol Power Project (DPP) and related disputes.[109] One of the fundamental sectors crucial for post-liberalisation industrial growth was the power sector.[110] The power sector was marked by inefficient government-run power plants working at 50 per cent capacity. Theft of power was rampant, with as much as 30 per cent of the

[104] J Mohan Rao and Amitava Krishna Dutt, 'A Decade of Reforms: The Indian Economy in the 1990s', in Lance Taylor (ed), *External Liberalization in Asia, Post-Socialist Europe, and Brazil* (New York 2006, online edn, Oxford Academic 1 May 2007); Atul Kohli, 'Politics of Economic Growth in India, 1980-2005: Part II: The 1990s and Beyond', (2006) 41(14) *Economic and Political Weekly* 1361.
[105] Philippe Aghion, 'The Unequal Effects of Liberalization: Evidence from Dismantling the License Raj in India', 98(4) *American Economic Review* 1397 (2008); See also Mohan Rao and Dutt, 'A Decade of Reforms' (n 104); Kohli, 'Politics of Economic Growth in India, 1980-2005' (n 104).
[106] Ranjan, *India and Bilateral Investment Treaties* (n 28) 120.
[107] ibid 121.
[108] ibid.
[109] Preeti Kundra, 'Looking Beyond the Dabhol Debacle: Examining Its Causes and Understanding Its Lessons', 41 *Vanderbilt Journal of Transnational Law* 907 (2008).
[110] ibid 911-912.

power being stolen.[111] Reforms were brought to the Indian Electricity Act in the early 1990s to encourage private participation. However, these reforms received tepid responses due to the 'Central Government's commitment to reform' and 'SEBs [State Electricity Board's] ability to pay for privately generated power.[112]

Therefore, the central government started looking outward, and a delegation of officials made efforts to encourage investment during their visits to the UK and the United States of America (USA).[113] After a visit from a number of executives, Enron Corporation proposed building a 2,015 MegaWatt (MW) gas-fired power plant in Dabhol, Maharashtra. Estimated at $2.8 billion, the DPP was to be the biggest foreign investment in India.[114] The project was backed by significant guarantees and incentives from both the Government of Maharashtra (GOM) and the Government of India (GOI).[115] The Overseas Private Investment Corporation (OPIC) further supported the project by providing funding and political risk insurance, covering risks like political violence and expropriation.[116]

The DPP, structured in two phases, involved significant collaboration with international partners. The first phase used distillate fuel to mitigate foreign exchange concerns, while the second Phase planned to use Liquefied natural gas (LNG). Enron, alongside General Electric and Bechtel (GE and Bechtel), formed the Dabhol Power Company (DPC), with the Maharashtra State Electricity Board (MSEB) committing to purchase the plant's output under a PPA.[117] This agreement was

[111] ibid 912.
[112] ibid.
[113] ibid.
[114] ibid.
[115] ibid 913.
[116] ibid 908.
[117] ibid 914.

also guaranteed by the GOM and the GOI, agreeing to pay ‘any sum of money validly due’ not paid by MSEB or the GOM under the PPA.[118]

However, the project soon encountered opposition and financial difficulties. Construction of Phase I, which began in 1995, faced political resistance, especially from the opposing Bhartiya Janta Party (BJP) and Shiv Sena parties in Maharashtra. This coalition won the elections based ‘on a platform of throwing Enron into the Arabian Sea’.[119] The new government scrutinised the project, criticising its transparency, costs, and environmental impact. By 1995, the project screeched to a halt, leading to international arbitration and legal disputes. A revised agreement was eventually negotiated, but it faced criticism for exacerbating financial issues rather than resolving them. Despite these challenges, Phase I was completed by May 1999.[120] Financial problems surfaced again 18 months post-operation, as power costs exceeded local affordability, and demand for electricity was lower than expected. The MSEB defaulted on payments, resulting in a reduction of its stake in DPC. The Godbole Committee, formed by the GOM, suggested renegotiating the project’s terms, including tariff restructuring and financing changes.[121]

As disputes escalated, MSEB sought to rescind the PPA, alleging misrepresentation by DPC; both the GOM and GOI refused to honour their guarantee, which resulted in the commencement of arbitration against MSEB, GOM, and GOI.[122] The Maharashtra Electricity Regulatory Commission (MERC) asserted jurisdiction over the dispute, leading to further legal wrangling in

[118] ibid 915-16, citing *Expropriation Claim Of Bank Of America, Opic Memorandum Of Determinations* 3 (2003). http://www.opic.gov/insurance/claims/report/ documents/BankofAmerica-September30-2003.pdf. 4
[119] ibid 917, citing Minority Staff Of H. Comm. On Government Reform, 107th Cong., *Fact Sheet: Background On Enron's Dabhol Power Project* 9 (Comm. Print 2002).
[120] ibid (n 109) 916-18.
[121] ibid 919-22.
[122] ibid 920.

the Bombay High Court and the Supreme Court of India. The High Courts of Bombay and Delhi also intervened, granting injunctions against DPC's arbitration efforts.[123]

While the appeal was pending at the Supreme Court, GE, and Bechtel approached OPIC to recoup damages under their political risk insurance.[124] They, along with Enron, were able to recoup the damages after the American Arbitration Association tribunal held that the investments had effectively been expropriated.[125] USA then filed for a state-to-state arbitration against India to recoup the $110 million paid by OPIC, a dispute which was later settled.[126] Bechtel also filed an arbitration under the shareholder agreement of DPC against MSEB at the International Chamber of Commerce, which ruled in favour of Bechtel to the tune of $125 million, in addition to commercial and state-to-state arbitrations. A number of lenders to the project also filed investment arbitrations, along with Dutch and Mauritian subsidiaries of GE, and Bechtel, respectively, under the investment treaties which were in force at the time.[127] Very little is known about these arbitrations other than that they were settled.

---

[123] ibid 922-23.

[124] 'Tribunal Rules for Bechtel and GE in Dabhol Power Project Arbitration' (*Bechtel*, 9 September 2023). https://www.bechtel.com/newsroom/press-releases/tribunal-rules-for-bechtel-and-ge-in-dabhol-power-project-arbitration/. Accessed 10 November 2024.

[125] *Bechtel Enterprises International (Bermuda) Limited and ors, Memorandum of determinations*, AAA Case No 50 T195 00509 02, IIC 1238 (2003).

[126] 'U.S. Initiates Arbitration Against India over OPIC Claims for the Dabhol Power Project', 99(1) *American Journal of International Law* 271 (2005).

[127] *See ABN Amro v India* (2004). https://investmentpolicy.unctad.org/investment-dispute-settlement/cases/149/abn-amro-v-india. Accessed 10 November 2024*;* *ANZEF v India* (2004). https://investmentpolicy.unctad.org/investment-dispute-settlement/cases/151/anzef-v-india. Accessed 10 November 2024; *BNP Paribas v India* (2004). https://investmentpolicy.unctad.org/investment-dispute-settlement/cases/147/bnp-paribas-v-india. Accessed 10 November 2024; *Credit Lyonnais v India* (2004). https://investmentpolicy.unctad.org/investment-dispute-settlement/cases/148/credit-lyonnais-v-india. Accessed 10 November 2024; *Credit Suisse v India* (2004). https://investmentpolicy.unctad.org/investment-dispute-settlement/cases/150/credit-suisse-v-india. Accessed 10 November 2024; *Erste Bank v India* (2004). https://investmentpolicy.unctad.org/investment-dispute-settlement/cases/141/erste-bank-v-india. Accessed 10 November 2024*; Offshore Power v. India* (2004). https://investmentpolicy.unctad.org/investment-dispute-settlement/cases/139/offshore-power-v-india. Accessed 10 November 2024; *Standard Chartered Bank v India* (2004). https://investmentpolicy.unctad.org/investment-dispute-settlement/cases/152/standard-chartered-bank-v-india. Accessed 10 November 2024; *Bechtel v India* (2003). https://investmentpolicy.unctad.org/investment-dispute-settlement/cases/104/bechtel-v-india. Accessed 10 November 2024; Investment Dispute Settlement Navigator, 'India: Cases as Home State of Claimant' (*UNCTAD*).

This case study perfectly illustrates offtaker and political risks faced by investors in long-term projects. This study also showcases the role of arbitration, both commercial and ISDS, in creating deterrence. However, this case study provides little information on the treaty claims. We simply do not know what was claimed and which standards would have been held to be violated. The fact is, IIL has evolved very rapidly since the very early part of the 21st century when this dispute arose. The conduct of the GOM and the GOI would have certainly breached the modern interpretations of FET and possibly indirect expropriation, which will be discussed in the next subsection. However, we can only speculate about what would have happened in those particular arbitrations at that time.

2.3. Standards of protection

In International Investment Law (IIL), the 'Standards of Protection' play a pivotal role in safeguarding foreign investments. These standards, including Protection against Expropriation, FET, FPS, NT, and MFN treatment, form the cornerstone of investor rights. While each standard is relevant, there are two standards which stand out. These are the FET and the Indirect Expropriation standards. We will take both of these in turn in the coming Parts, along with a very brief discussion on the importance of arbitration. This discussion will be further clarified by a hypothetical analysis of the Dabhol facts and how they are likely to be adjudicated by an investment tribunal in the present.[128]

2.3.1. Protection against expropriation

---

https://investmentpolicy.unctad.org/investment-dispute-settlement/country/96/india/investor. Accessed 10 November 2024.

[128] The hypothetical analysis has significant limitations and should only be considered illustrative.

Expropriation is the most classic example of the host state's interference with the property or the 'investment'[129] of the 'investor'.[130] It is also the most severe form of interference when the ownership itself is transferred from the investor to the host state or instrumentalities thereof. This interference has been a central concern of Customary International Law (CIL) dealing with property belonging to aliens.[131] Certain limitations have been placed on the state's right to expropriate alien property, consistent with the principle of territorial sovereignty.[132] Treaty law also recognises this *right* of the state to expropriate property belonging to aliens. However, it places certain requirements to be fulfilled in order for any expropriation to be lawful.[133] The requirements found in most investment treaties and considered a part of the CIL can be summed up as::

1. Public Purpose: The action must serve a public interest. While this is usually not heavily disputed, host States generally have considerable leeway in defining what constitutes a public purpose.

2. Non-Discrimination: The measure should avoid discrimination, especially based on nationality, although other forms of discrimination may also be relevant.

3. Due Process: Certain treaties explicitly require expropriation to adhere to due process principles. Since due process aligns with the minimum standard of international law and the fair and equitable treatment standard, its role as a separate requirement for lawful

---

[129] For a discussion on Protected Investor see Dolzer, Kriebaum, and Schreuer, *Principles of International Investment Law* (n 24) 58.
[130] For a discussion on Protected Investment see ibid 82.
[131] American–Venezuelan Mixed Claims Commission, *Rudloff Case*, Decision on Merits, 1 January 1903, 9 RIAA 255; Permanent Court of Arbitration, *Norwegian Shipowners' Claim (Norway v USA)*, Award, 13 October 1922, (1948) 1 RIAA 307; *Case Concerning Certain German Interests in Polish Upper Silesia*, 1926 PCIJ Series A, No 7, 3.
[132] Dolzer, Kriebaum, and Schreuer, *Principles of International Investment Law* (n 24) 147.
[133] ibid 183.

expropriation can be ambiguous. However, expropriations lacking due process have sometimes been deemed illegal by tribunals.

4. Compensation: The expropriation must include prompt, adequate, and effective compensation to be considered legal.

Meanwhile, the earlier cases primarily dealt with direct expropriations of tangible property. These types of expropriations have become rarer. Therefore, treaty law and the CIL, with it, have evolved to include indirect expropriation and intangible property within it.[134] While direct expropriations, such as in the form of nationalisations, meant a transfer of the title of ownership, indirect expropriations can happen without any such transfer.[135] Most treaties today protect investors against measures 'equivalent' or 'tantamount' to expropriation.[136] Most tribunals take the severity and the duration of the deprivation into account when deciding on whether certain measures have crossed a threshold of equivalence.[137] The tribunals are divided on whether certain measures reach that threshold when the ownership rests with the investor.[138] Tribunals are also divided on whether the intention of the state has to be taken into account or only the effect on the investment when ruling on whether certain regulatory measures are equivalent to expropriation. While some tribunals have ruled that changing regulatory regimes rests with the state under their 'police powers', other tribunals have applied a standard of reasonableness, such as the doctrine of proportionality.[139] Given the decentralised nature of investment tribunals, it is entirely possible for

[134] ibid 87.
[135] ibid 153.
[136] ibid.
[137] ibid 163-67.
[138] ibid 167.
[139] ibid 169-176.

two tribunals constituted under the same treaty and dealing with similar claims by different investors to reach opposing conclusions on whether specific measures constitute expropriation.

In terms of contractual rights, which were central to the Dabhol Dispute, the tribunal in *Parkerings-Compagniet v Lithuania* held that a:

> [B]reach of an agreement will amount to an expropriation only if the state acted not only in its capacity of party to the agreement but also in its capacity of sovereign authority, that is to say, using its sovereign power. The breach should be the result of this action. A State or its instrumentalities which simply breach an agreement, even grossly, acting as any other contracting party might have done, possibly wrongfully, is therefore not expropriating the other party.[140]

In the Dabhol hypothetical, the severity of the measures, i.e., rescinding the PPA and non-payment of the amount due, had brought the entire project to a halt. Without the MSEB buying the power produced by the plant, the effective value of the plant would be reduced substantially. Also, the duration of the measures was essentially permanent, as there was no intention of the GOM or GOI to renegotiate the PPA or fulfil their guarantees. Some tribunals may also take into account whether the measures were for a public purpose and whether the measures were proportional to purpose; however, that analysis is much more subjective and is therefore outside the scope of this discussion.[141] The question then remains whether these actions were taken using sovereign power. Interference by a high-powered government committee, MERC and the judiciary would amount

[140] *Parkerings-Compagniet v Lithuania,* Award, 11 September 2007 [443].
[141] While appropriate, it is no way mandatory that Tribunals go through a balancing exercise. Some tribunals only look at the effect of the measures regardless of the intention. See Dolzer, Kriebaum, and Schreuer, *Principles of International Investment Law* (n 24) 169.

to a breach of the contract in the *capacity of sovereign authority*. Given the severity and duration of the measures, India's conduct would likely amount to an indirect expropriation.[142]

2.3.2. Fair and Equitable Treatment

Fair and Equitable treatment standards have been included in various treaties since the mid-20th century. However, only recently has it gained prominence in IIL as a flexible and versatile standard.[143] An FET clause is usually either qualified or unqualified. An unqualified FET can be found in Article 3(2) of the Australia-India BIT 1999:

> Investments or investors of each Contracting Party shall at all times be accorded fair and equitable treatment.[144]

A qualified FET can be found in Article 8.10 (2) of The Comprehensive and Economic Trade Agreement ('CETA'), which states:

> A Party breaches the obligation of fair and equitable treatment referenced in paragraph 1 if a measure or series of measures constitutes:
>
> (a) denial of justice in criminal, civil or administrative proceedings;
>
> (b) fundamental breach of due process, including a fundamental breach of transparency, in judicial and administrative proceedings;
>
> (c) manifest arbitrariness;

[142] See ibid 157. This Part provides illustrative cases with similar facts to one in DPP study and where tribunals have held similar facts to be indirect expropriation.
[143] See Muthucumaraswamy Sornarajah, *The International Law on Foreign Investment* (Cambridge: Cambridge University Press 2021).
[144] 'Australia–India BIT (1999)' (*UNCTAD*, 1999). https://investmentpolicy.unctad.org/international-investment-agreements/treaties/bit/209/australia---india-bit-1999-. Accessed 10 November 2024.

> (d) targeted discrimination on manifestly wrongful grounds, such as gender, race or religious belief;
>
> (e) abusive treatment of investors, such as coercion, duress and harassment, or
>
> (f) a breach of any further elements of the fair and equitable treatment obligation adopted by the Parties in accordance with paragraph 3 of this Article.[145]

The CETA FET clause is illustrative as it acknowledges different interpretations of FET as made by numerous tribunals. The trend of qualifying the FET clause is a recent one. An unqualified FET clause creates the issue of indeterminacy as to what rights it actually confers on the investors. The first tribunal to give a comprehensive definition of what obligations an unqualified FET clause confers on a state can be found in Para 154 of the Award in *Tecmed v Mexico*. The Tribunal stated,

> The Arbitral Tribunal considers that this provision of the Agreement, in light of the good faith principle established by international law, requires the Contracting Parties to provide international investments treatment that does not affect the basic expectations that were taken into account by the foreign investor to make the investment. The foreign investor expects the host State to act in a consistent manner, free from ambiguity and totally transparently in its relations with the foreign investor so that it may know beforehand any and all rules and regulations that will govern its investments, as well as the goals of the relevant policies and administrative practices or directives, to be able to plan its investment and comply with such regulations. . . The foreign investor also expects the host State to act consistently, i.e. without arbitrarily revoking any

[145] EU-Canada Comprehensive Economic and Trade Agreement (entered into force provisionally in 2017) art 8.10(2).

> preexisting decisions or permits issued by the state that were relied upon by the investor to assume its commitments as well as to plan and launch its commercial and business activities. The investor also expects the state to use the legal instruments that govern the actions of the investor or the investment in conformity with the function usually assigned to such instruments, and not to deprive the investor of its investment without the required compensation.[146]

This 'definition' has rightfully been criticised as not so much a standard but perfect public regulation in a perfect world.[147] Each tribunal, similar to indirect expropriation, can form its own opinion of what is and is not *fair and equitable* in any given scenario. Therefore, instead of looking at FET in a vacuum, it has been read with the larger framework of investment protection of which it is a part. FET standard has, therefore, been linked to stability,[148] transparency[149] and the investor's legitimate expectations[150] among others, all of which are necessary to promote investment.

The Tribunal in *Total v Argentina* elucidated the requirement of stability under FET in the following terms:

> Stability, predictability and consistency of legislation and regulation are important for investors in order to plan their investments, especially if their business plans extend over a number of years. Competent authorities of States entering into BITs in order to promote foreign investment in their economy

[146] *Tecmed v Mexico ICSID Case No ARB(AF)/00/2*, Final Award, 29 May 2003 [154].
[147] Zachary Douglas, 'Nothing if Not Critical for Investment Treaty Arbitration: Occidental, Eureko and Methanex' (2006) 22(1) *Arbitration International* 27, 28.
[148] Dolzer, Kriebaum, and Schreuer, *Principles of International Investment Law* (n 24) 205.
[149] ibid 212.
[150] ibid 208.

> should be aware of the importance for the investors that a legal environment favourable to the carrying out of their business activities be maintained.[151]

The tribunal in *Metalclad v. Mexico* interpreted the requirement of transparency in the FET standard in the following terms:

> The tribunal understands this to include the idea that all relevant legal requirements for the purpose of initiating, completing and successfully operating investments made, or intended to be made, under the Agreement should be capable of being readily known to all affected investors of another Party. There should be no room for doubt or uncertainty on such matters. Once the authorities of the central government of any Party . . . become aware of any scope for misunderstanding or confusion in this connection, it is their duty to ensure that the correct position is promptly determined and clearly stated so that investors can proceed with all appropriate expedition in the confident belief that they are acting in accordance with all relevant laws.[152]

The Tribunal in *Suez and InterAguas v Argentina* explained the concept of legitimate expectation on the basis of good faith and when reliance is placed upon the *undertakings and representations* of the host state in the following terms:

> When an investor undertakes an investment, a host government, through its laws, regulations, declared policies, and statements, creates in the investor certain expectations about the nature of the treatment that it may anticipate from

[151] *Total v Argentina ICSID Case No. ARB/04/1,* Decision on Liability, 27 December 2010 [114].
[152] *Metalclad v Mexico ICSID Case No. ARB(AF)/97/1*, Award, 30 August 2000 [76].

> the host State. The resulting reasonable and legitimate expectations are important factors that influence initial investment decisions and afterwards the manner in which the investment is to be managed.[153]

These three rights, as interpreted under the FET standard, create certain obligations for the state even when there is no clear commitment to stability, transparency, or freezing of laws or regulations. Put together, they create an incredibly flexible standard which can protect investors from a number of measures which may be deemed 'unfair' and 'inequitable' in the light of the prevailing circumstance.[154]

In our Dabhol hypothetical, finding a breach of the FET standard is quite straightforward. Through a number of representations, from the PPA to guarantees by the GOM and GOI on which the investors placed reliance to go through with the investment. Any reasonable person can assume that these legal promises created certain expectations that the investors in the DPP would be able to sell the electricity to the MSEB for the long term. However, the conduct by India clearly violated these legitimate expectations apart from the clear breach of contract,[155] and denial of justice,[156] which may be separate grounds for breach under the FET. It is highly likely, bordering on certain, that an investment tribunal would find a breach of FET standard under the Dabhol hypothetical.

2.3.3. Access to arbitration

Apart from the standards, most investment treaties also provide access to investment arbitration. Depending on the treaty and the states involved, these arbitrations may be held at ICSID,

[153] *Suez and InterAguas v Argentina ICSID Case No. ARB/03/17,* Decision on Liability, 30 July 2010 [203].
[154] Dolzer, Kriebaum, and Schreuer, *Principles of International Investment Law* (n 24).
[155] ibid 214. A breach of Contract may also be a violation of a treaty under a different standard called an Umbrella Clause. 271.
[156] ibid 216.

International Chamber of Commerce (ICC), Stockholm Chamber of Commerce (SCC) or at the Permanent Court of Arbitration (PCA), among other institutions. Arbitration provides a neutral and independent forum for resolving disputes when any of the standards of protection are violated. Arbitrators engaged in Investment Arbitration are also experts in IIL, which is not the case with domestic judges. Arbitration awards also enjoy near universal enforceability under the New York Convention.[157] Therefore, arbitration presents itself as an incredibly attractive destination for foreign investors to resolve disputes.[158]

The Dabhol hypothetical clearly illustrates the potential bias of the domestic courts. The host state may exercise significant control over the domestic courts if not total control. In judicial systems such as India, significant delays, appeals, and unenforceability of the decree may itself be grounds for an investment claim, as was the case in *White Industries v India*.[159]

2.4. Tax disputes and termination of treaties

Our prevailing discussion makes it clear that investment treaties impose significant restrictions on the host state. While cases like Dabhol are relatively straightforward, many cases are much more contentious. Two of these cases were investment arbitrations against India by Vodafone and Cairn Energy.[160] This subsection discusses in detail two cases which contributed to India's termination of its investment treaties.

---

[157] Convention on the Recognition and Enforcement of Foreign Arbitral Awards (New York, 10 June 1958, 330 UNTS 3) art 3.
[158] Dolzer, Kriebaum, and Schreuer, *Principles of International Investment Law* (n 24) 339-342.
[159] *White Industries Australia v India*, Final Award, 30 November 2011. See also ibid 216.
[160] *Vodafone International Holdings BV v India* (I), PCA Case No 2016-35. https://investmentpolicy.unctad.org/investment-dispute-settlement/cases/581/vodafone-v-india-i-. Accessed 10 Novemebr 2024; *Vodafone Group Plc and Vodafone Consolidated Holdings Limited v India* (II). https://investmentpolicy.unctad.org/investment-dispute-settlement/cases/819/vodafone-v-india-ii-. Accessed 10 November 2024; *Cairn Energy PLC and Cairn UK Holdings Limited v The Republic of India*, PCA Case No. 2016-

Central to the dispute was Vodafone's acquisition of a 67 per cent stake in Hutchinson Essar Limited through an indirect transfer.[161] The Indian Tax Department contended that the transaction was taxable.[162] This dispute went all the way to the Supreme Court, which ruled in favour of Vodafone.[163] However, India amended the Income Tax Act in 2012 to impose a retrospective tax on 'indirect transfers'.[164] Vodafone, a Dutch entity, filed a claim under the India-Netherlands BIT, 'the tribunal ruled that imposition of retroactive tax on Vodafone, despite the Supreme Court's Decision, breaches the FET provision'.[165]

Cairn Energy's indirect transfer also fell under the provisions of the amended Income Tax Act.[166] Cairn Energy filed a claim under the India-UK BIT.[167] The tribunal reached a similar conclusion and held that the retrospective imposition of tax violated the FET standard.[168]

The government's stance that BITs should not cover tax disputes led to the unilateral termination of almost all of its investment treaties.[169] This was followed by the introduction of a new model

---

7. https://investmentpolicy.unctad.org/investment-dispute-settlement/cases/691/cairn-v-india. Accessed 10 November 2024.

[161] Prabhash Ranjan, 'Investor-State Dispute Settlement and Tax Matters: Limitations on State's Sovereign Right to Tax' (2023) 31(1) *Asia Pacific Law Review* 219.

[162] ibid.

[163] ibid.

[164] ibid.

[165] ibid.

[166] ibid.

[167] ibid.

[168] ibid.

[169] Approximately 76 treaties were terminated, see for example Agreement between the Government of the Republic of India and the Government of the United Kingdom of Great Britain and Northern Ireland for the Promotion and Protection of Investments (signed 14 March 1994, entered into force 6 January 1995, terminated 23 March 2017); Agreement between the Government of the Republic of India and the Kingdom of the Netherlands for the Promotion and Protection of Investments (signed 6 November 1995, entered into force 1 December 1996, terminated 22 September 2016); Agreement between the Government of the Republic of India and the Federal Republic of Germany on the Promotion and Protection of Investments (signed 10 July 1995, entered into force 13 July 1998, terminated 3 June 2017); For more information about these treaties, please visit 'International Investment Agreements Navigator: India' (*UNCTAD*). https://investmentpolicy.unctad.org/international-investment-agreements/countries/96/india. Accessed 10 November 2024.

BIT in 2016, narrowing investor protections and excluding tax matters from arbitration.[170] While these actions aim to prevent treaty misuse and protect regulatory rights, they have raised concerns about the investment climate in India, with fears of deterring foreign investment due to perceived unpredictability and reduced legal protections. This change directly affects investment in RE projects and climate mitigation efforts.

2.5. Recent changes to the stance

In 2021, five years after the adoption of the Indian Model BIT and ten years after the first BIT claim against India, the Standing Committee on External Affairs submitted its report on 'India and Bilateral Investment Treaties'. The report made several suggestions, beginning with its discontent with the lack of BITs signed after the adoption of the Indian Model BIT. It linked the signing of BITs with increased FDI inflow.[171] To that end, the report recommended that India finish its negotiations and sign more BITs. The committee also recommended that the Model BIT be fine-tuned; however, it did not specify what this fine-tuning would entail. Lastly, the committee recommended capacity building of government officials in ISDS.[172]

There are reports that India may sign BITs as part of FTA negotiations with the UK and the EU.[173] India has also recently signed a BIT with UAE.[174] However, no information is available publicly

[170] Prabhash Ranjan and Pushkar Anand, 'The 2016 Model Indian Bilateral Investment Treaty: A Critical Deconstruction' (2017) 38 *Northwestern Journal of International Law & Business* 1; Grant Hanessian and Kabir Duggal, 'The 2015 Indian Model BIT: Is This Change The World Wishes To See?' (2015) 30(3) *ICSID Review-Foreign Investment Law Journal* 729.
[171] This is somewhat questionable as several empirical studies have not found a positive correlation between BITs and FDI. See Dolzer, Kriebaum, and Schreuer, *Principles of International Investment Law* (n 24) 29 footnote 117.
[172] Ministry of External Affairs, *India and Bilateral Investment Treaties* (10th Report of the Committee on External Affairs 2022). https://eparlib.nic.in/bitstream/123456789/931959/1/17_External_Affairs_14.pdf. Accessed 10 November 2024. 11-12.
[173] Dutta Mishra and Aulakh, 'India May Junk 2016 Model for Bilateral Investment Treaties with UK, EU' (n 28).
[174] 'International Investment Agreements Navigator, India-United Arab Emirates BIT (2024)' (n 29).

about the content of these treaties. It is unlikely that the text will be publicly available before it is ratified by the parliament. The impact of the recent elections on the negotiation and ratification of these agreements is also unclear. The lack of publicly available information also brings to light another set of issues with India's treaty practice: the lack of transparency and denial of public participation.[175]

2.6. Summary

This Part of the paper provides a comprehensive overview of India's stance on IIL. The proliferation of BITs laid the groundwork for modern IIL, influenced by the spread of neo-liberalism. Currently, over 3000 treaties form the backbone of the IIL regime, offering a neutral and expert-driven resolution mechanism that is distinct from domestic legal systems.

The paper delves into the core standards of protection in IIL—FET and Protection against Expropriation, alongside the access to arbitration or ISDS. The discussion highlights how these standards ensure market access, stability, and a viable exit for foreign investments. Focusing on India, the paper outlines its liberalisation journey starting in the 1990s, marked by the signing of numerous BITs. The Dabhol Power Project (DPP) case exemplifies the market and political risks in long-term projects and the role of ISDS in such disputes. This analysis sets up the discussion on India's present investment climate in RE without ISDS.

[175] For issues with transparency and public participation in terms of the Transatlantic Trade and Investment Partnership see Ferdi De Ville and Gabriel Siles-Brügge, 'Why TTIP is a Game-Changer and Its Critics Have a Point' (2017) 24 *Journal of European Public Policy* 1491; Vigjilenca Abazi, 'How Confidential Negotiations of the TTIP Affect Public Trust' (2016) 7 *European Journal of Risk Regulation* 247.

3. India's mitigation law and current investment protection

India's RE sector has seen significant growth in recent years. This is due to a number of policies which encourage investment, given the abundance of sunlight and other renewable sources of energy in the subcontinent. The Electricity Act 2003 revamped power sector laws to stimulate growth, especially in rural areas, and introduced mechanisms like Feed-in Tariff (FiT) and Renewable Purchase Obligation. The 2016 Tariff Policy integrated RE into national objectives and strengthened the focus on renewables and hydropower.[176]

The Integrated Energy Policy 2006 aimed to balance energy security with environmental considerations, mandating regulators to incorporate solar and other renewables into the power mix.[177] This policy paved the way for innovative incentives and regulatory frameworks promoting solar energy. National Action Plan on Climate Change 2008 highlighted India's commitment to sustainable development, with The National Solar Mission in 2010 being a key component, helping electrify remote areas and promote domestic manufacturing capabilities.[178]

Under these initiatives, incentives for RE include tax benefits, FiT, PPAs, Renewable Purchase Obligations, RE Certificates, Clean Energy Cess, Generation-based Incentives, and Viability Gap

[176] For a more detailed explanation, see Nishant Rohankar et al., 'A Study of Existing Solar Power Policy Framework in India For Viability of The Solar Projects Perspective' (2016) 56 *Renewable and Sustainable Energy Reviews* 510; Vikas Khare, Savita Nema, and Prashant Baredar, 'Status of Solar Wind Renewable Energy in India' (2013) 27 *Renewable and Sustainable Energy Reviews* 1.

[177] Planning Commission, Government of India, 'Integrated Energy Policy: Report of the Expert Committee' (*web.archive.org*, 2006). https://web.archive.org/web/20060428062412/http://planningcommission.nic.in/reports/genrep/intengpol.pdf. Accessed 10 November 2024.

[178] Rohankar et al., 'A Study of Existing Solar Power Policy Framework in India For Viability of The Solar Projects Perspective' (n 176); Khare, Nema, Baredar, 'Status of Solar Wind Renewable Energy in India' (n 176).

Funding.[179] This Part's aim is not to assess the appeal of these incentives, which is better done elsewhere.[180]

This Part looks specifically at the treatment of domestic investors under these incentive schemes without recourse to ISDS.[181] This section argues that without recourse to ISDS, India's regulatory regime poses a number of issues that make it unattractive for FDI.

3.1. A challenging landscape for investors: Lack of predictability, stability and effective remedy

The aim of this section is to analyse the current issues in the RE investment landscape. This Part starts with a discussion on the primary risk that most RE investors face, offtaker risk.[182] After this, a brief discussion is provided on how offtaker risk can elevate to political and regulatory risk through the example of PPA renegotiations.

3.1.1. Offtaker Risk

In India, Offtaker risk is closely associated with political risk. These risks can manifest themselves in three different forms: 1) non-signing of PPA; 2) non-payment of dues and renegotiation; or 3)

---

[179] ibid.

[180] Abhishek Sharma, Priya Mahajan, and Rachana Garg, 'Analysing the Impact of Various Incentives on Solar Tariff in India' (2022) 41(2) *International Journal of Sustainable Energy* 126.

[181] Most investors in RE are Indian domestic investors. However, if the option of ISDS was available, investment could be structured in a way that their investments would be protected by IIL. See Jorun Baumgartne*, Treaty Shopping in International Investment Law* (Oxford: Oxford University Press 2016). Adherence to IIL, regardless, would benefit both foreign and domestic investors. It is improbable that the authorities would renegotiate or change incentives for only domestic investors while freezing them for foreign investors. Therefore, incorporating IIL would help both domestic and foreign investors equally and signal a positive change in the RE investment climate.

[182] Hemi H Gandhi, Bram Hoex, and Brett Jason Hallam, 'Strategic Investment Risks Threatening India's Renewable Energy Ambition' (2022) 43 *Energy Strategy Reviews* 100921, 9.

cancellation of existing PPA.[183] All of these combined significantly impact the predictability and stability of India's RE market.

3.1.1.1. Non-Signing of PPA

State Distribution Companies ('DISCOMs') along with Solar Energy Corporation of India have delayed signing tariffs realised by competitive bidding if the tariff is deemed too high. Uttar Pradesh, in 2021, cancelled a 500 MW solar auction, citing high tariffs. The price realised was Rs 3.18/KWh, while a year ago, bids of around Rs. 2/KWh were realised in Rajasthan and Gujarat.[184] The Director of Uttar Pradesh New and Renewable Energy Development Agency ('UPNEDA') made a statement

> In light of recent events, where very low solar tariffs have been discovered in Rajasthan and Gujarat and the bids invited by the Solar Energy Corporation of India, it seems very likely that a fresh bid may deliver better tariffs for consumers of Uttar Pradesh in which case you are cordially invited to participate in the same.[185]

However, a lot has changed since those tariffs were realised in Gujarat and Rajasthan, including changes to duty on solar modules, increase in prices of solar modules and supply chain disruptions due to Covid-19.[186]

Previously, Gujarat Urja Vikas Nigam Limited ('GUVNL') had also refused to sign a PPA in 2018 and 2019. In Oct 2020, GUVNL auctioned 700 MW at Rs 2.78/kWh; however, just two months

---

[183] ibid.
[184] Rakesh Ranjan, 'Uttar Pradesh Scraps 500 MW Solar Auction, Plans to Re-Auction Hoping for Lower Bids' (*Mercom*, 3 June 2021). https://www.mercomindia.com/uttar-pradesh-scraps-500-mw-solar-auction-plans-to-re-auction-hoping-for-lower-bids. Accessed 10 November 2024.
[185] ibid.
[186] ibid.

later, it realised a record low of Rs 1.99/kWh for a 450 MW auction. GUVNL approached the State Electricity Regulatory Commission (‘SERC’), which approved GUVNL’s request to cancel the auction.[187] Central agencies, too, have cancelled significant contracts due to high tariffs, with Solar Energy Corporation of India terminating a 2,400 MW solar scheme and another 1.7 GW of contracts.[188]

This practice highlights the lack of sanctity and enforceability that a contract has in India. Cancelling and refloating a tender causes significant delays in the project while reducing investors' confidence in any representation of the state agencies.

3.1.1.2. Payment delay risk

DISCOMs often set lower-than-cost tariffs for certain consumer groups. This practice adversely affects their revenue and profitability. The process of setting these low tariffs is deeply political and institutionalised, hindering DISCOMs from increasing tariffs as needed. Each financial year, DISCOMS propose tariffs based on anticipated distribution sales and expenses for different consumer categories. These proposed tariffs are submitted to the state government and the SERC for approval. However, the approved tariffs are significantly reduced for key voter demographics such as agricultural, residential, below-poverty line households, and religious organisations.[189]

Therefore, most DISCOMs are cash-strapped, which leads to significant payment delays. The average payment time can range from 30 days in Gujarat to 540 days in Tamil Nadu and Andhra

---

[187] Gandhi, Hoex, Hallam, ‘Strategic Investment Risks Threatening India’s Renewable Energy Ambition’ (n 182) 9; Also see Nitin Thomas Prasad, ‘In Another Bad Precedent, Gujarat Regulator Allows DISCOM to Scrap 700 MW Solar Auction’ (*Mercom*, 3 February 2021). https://www.mercomindia.com/gujarat-regulator-scraps-solar-auction. Accessed 10 November 2024.
[188] Saumy Prateek, ‘Why 2.4 GW Solar Action Was Cancelled’ (*Mercom*, 12 October 2018). https://www.mercomindia.com/why-2-4-gw-solar-auction-cancelled. Accessed 10 November 2024.
[189] Gandhi, Hoex, Hallam, ‘Strategic Investment Risks Threatening India’s Renewable Energy Ambition’ (n 182) 6.

Pradesh.[190] This can cause significant cash flow issues for an investor. Harm their Economic Internal Rate of Return and make further investments into RE projects impossible.[191]

Furthermore, non-payment or the inability of DISCOMs to pay dues can also lead to the politicisation of these disputes. This politicisation may lead to the renegotiation or cancelling of a PPA with an investor.

3.1.1.3. Cancellation or renegotiation of PPA

The most egregious example of a lack of predictability and stability in India's RE investment climate is the renegotiation of PPAs. Many states, including Andhra Pradesh,[192] Karnataka,[193] Tamil Nadu,[194] Punjab,[195] and Uttar Pradesh,[196] have either mulled over or have renegotiated PPAs for a lower tariff than agreed upon previously. The reason for the renegotiation has generally been the financial challenges faced by DISCOMs in paying the producer their dues. These renegotiations raise significant concerns about contractual stability and investor confidence in the

---

[190] ibid 10.

[191] ibid.

[192] Sarita C Singh, 'Can't Renegotiate PPAs: Clear RE Dues in 6 Weeks: AP HC on PPA Reneging Matter' (*The Economic Times*, 15 March 2022. https://economictimes.indiatimes.com/industry/energy/power/cant-renegotiate-ppas-clear-re-dues-in-6-weeks-ap-hc-on-ppa-reneging-matter/articleshow/90231424.cms. Accessed 10 November 2024.

[193] 'Renegotiate High-Cost Power Purchase Agreements, Says Power Reforms Committee' (*The Hindu*, 28 June 2022). https://www.thehindu.com/news/national/karnataka/renegotiate-high-cost-power-purchase-agreements-says-power-reforms-committee/article65573241.ece. Accessed 10 November 2024.

[194] Rakesh Ranjan, 'Tamil Nadu Commission Denies Tariff of ₹7.01/kWh for 288 MW of Delayed Solar Projects' (*Mercom*, 29 July 2021). https://www.mercomindia.com/tamil-nadu-commission-denies-tariff. Accessed 10 November 2024.

[195] Somit Dasgupta, 'Punjab Renegotiating Power Purchase Agreements Could Endanger India's Renewable Energy Goals' (*The Wire*, 3 December 2021). https://thewire.in/energy/punjab-renegotiating-power-purchase-agreements-could-endanger-indias-renewable-energy-goals. Accessed 10 November 2024.

[196] Saumy Prateek, 'No Agreement Reached on Renegotiated PPAs for Six Solar Projects in Uttar Pradesh' (*Mercom*, 1 February 2018). https://www.mercomindia.com/agreement-renegotiated-ppas-uttar-pradesh. Accessed 10 November 2024.

RE sector.[197] The renegotiations usually target older PPAs due to the significant reduction in tariffs in recent years.[198]

The case of AP serves as a prominent example of the inability of DISCOMs to pay, elevating to political and regulatory risk. Andhra Pradesh's DISCOMs had a long history of poor performance and heavy debt. The newly elected Chief Minister of AP took the controversial step of renegotiating PPAs worth billions of dollars, claiming these agreements were corruptly awarded by the previous administration and controversially blamed them for the significant financial losses of AP's DISCOMs.[199] They retroactively reduced the tariffs of old PPAs by 55% to align with the lowest rates ever recorded in India. They threatened to cancel PPAs unless these new tariffs were accepted, issued notices to reclaim past payments from higher tariff projects, halted payments to RE investors, challenged the mandatory operational status of RE, and cancelled more than 20 RE projects that were under construction.[200]

These abrupt measures by Andhra Pradesh had a profound impact on both domestic and global investors. The investors have a bad bargaining position against the state agencies. Delays in judicial proceedings and difficulty in enforcing orders further exasperate the issue. The renegotiated PPAs under economic duress significantly harm the investment climate in India. While the existing investors have little choice, this behaviour can easily deter new investments from both domestic and foreign sources. These issues lead to an absurd result where these risks

---

[197] CRISIL, '*REturn to Uncertainty*' (September 2019). https://www.crisil.com/content/dam/crisil/our-analysis/reports/Research/documents/2019/october/return-to-uncertainty.pdf. Accessed 12 November 2024.
[198] Gandhi, Hoex, Hallam, 'Strategic Investment Risks Threatening India's Renewable Energy Ambition' (n 182) 9.
[199] Vaibhav Pratap Singh, 'Andhra Pradesh—Sending Investors Packing, Even if Contracts are Upheld' (*Centre for Energy Finance*, July 31 2019). https://www.ceew.in/cef/quick-reads/analysis/andhra-pradesh-sending-investors-packing-even-if-contracts-are-upheld. Accessed 4 May 2021.
[200] Gandhi, Hoex, Hallam, 'Strategic Investment Risks Threatening India's Renewable Energy Ambition' (n 182) 10-11.

reduce the value of existing plants with high tariffs, with most investors refusing to invest in plants with tariffs higher than Rs. 4/KWh.[201]

IIL and access to ISDS can be significant deterrents for a host state considering changes in applicable regulations or agreements.[202] Depending on the regulation, this freeze can be a good or a bad thing.[203] This deterrence, at least in RE investment policy and PPAs, would ensure predictability and stability, which is essential for investors. However, this behaviour should be avoided regardless if India is to achieve its climate and economic goals. India must adhere to the rule of law and predictability in its investment environment in order to maximise its potential.

3.2. Change in law clauses, lack of effective remedy and regulatory risk

Offtaker risks represent one kind of risk; another associated risk is changes in laws and regulations applicable to the investment. With the duration of PPAs being 20-25 years, it is not realistic for the laws and regulations to remain frozen. This issue is, therefore, dealt with by a Change in Law (CAL) clause.[204] While even without a CAL clause, an investor may be owed compensation under the principle of restitution as has been settled by the Supreme Court,[205] a CAL clause ensures that if any additional costs are imposed by a change in law or regulation, the other party is responsible

[201] ibid 11.
[202] Kyla Tienhaara, 'Regulatory Chill in a Warming World: The Threat to Climate Policy Posed By Investor-State Dispute Settlement' (2018) 7(2) *Transnational Environmental Law* 229; Krzysztof J Pelc, 'What Explains the Low Success Rate of Investor-State Disputes?' (2017) 71(3) *International Organization* 559 (2017).
[203] ibid. See also Kyla Tienhaara, 'Regulatory Chill and the Threat of Arbitration: A View from Political Science' in Chester Brown and Kate Miles (eds), *Evolution in Investment Treaty Law and Arbitration* (Cambridge University Press 2011).
[204] Sugandha Somani Gopal, *Appraising the Change in Law Clause* (CEEW Series: Rethinking Renewable Energy Power Purchase Agreements 2019). https://www.ceew.in/sites/default/files/CEEW-Change-in-Law-Clause-PPA-Series-28Jun19.pdf. Accessed 10 November 2024.
[205] *Uttar Haryana Bijli Vitran Nigam Ltd v Adani Power Ltd & Ors,* 25 February 2019, SC Civil Appeal No 5865 of 2018.

for funding such change. A CAL clause can be found in the sample PPA shared by Rajasthan Urja Vikas Nigam Limited:

Article 12: Change In Law

12.1.

12.1.1 The term “Change in Law” shall refer to the occurrence of any of the following events pertaining to this project only after [Insert the last date of bid submission]-

i. a change in interpretation of any law by a competent court or

ii. a change in any domestic tax, including duty, levy, cess, charge or surcharge by the Central Government, State Government or Union territory administration leading to corresponding changes in the cost,

iii. a change in any condition of an approval or license obtained or to be obtained for the purchase, supply or transmission of electricity, unless specifically excluded in the agreement for the purchase, supply or transmission of electricity, which results in any change in the cost, but does not include

a) Any change in any withholding tax on income or dividends distributed to the shareholders of the generating company or transmission licensee; or

b) change in respect of deviation settlement charges or frequency intervals by an Appropriate Commission.

> 12.1.2 The term 'law' in this Article includes any Act, Ordinance, order, bye-law, rule, regulation, notification, for the time being in force, in the territory of India.[206]

A CAL clause, therefore, works like a FET clause under an investment treaty.[207] Many existing PPAs do not have a comprehensive CAL clause.[208] For example, in 2014, the Andhra Pradesh Electricity Regulatory Commission, under a competitive bidding route and the PPA issued by the Telangana State Southern Power Distribution Company Limited for procuring 2,000 MW solar power, limited the definition of change in the law to

> any change or amendment to the provisions of electricity law in force, regulations, directions, and notifications issued by the competent authorities and Government of India, Government of Telangana, including the erstwhile Government of Andhra Pradesh from time to time.[209]

This definition is problematic as it does not include new laws which may be enacted or an old law which may be repealed. This definition also does not account for changes in tax or customs.[210] However, that practice seems to be changing, with PPAs of most state DISCOMs containing a comprehensive CAL clause, including the one for the Andhra Pradesh Electricity Regulatory Commission.[211]

---

[206] Rajasthan Urja Vikas Nigam Limited, *Sample Power Purchase Agreement*. http://103.122.36.131/content/dam/raj/energy/ruvnl/pdf/PP/PPA%20Document-1000%20MW%20Solar%20PV%20_Final%20for%20Upload.pdf. Accessed 10 November 2024.
[207] Gopal, *Appraising the Change in Law Clause* (n 204).
[208] ibid 14.
[209] ibid 4.
[210] ibid.
[211] Andhra Pradesh Electricity Regulatory Commission, *Draft PPA*. https://aperc.gov.in/admin/upload/DraftPPA.pdf. Accessed 10 November 2024. Clause 11.

While having a CAL clause presents a welcome change, the investors still have to go through Indian administrative and judicial procedures. The first forum for redressal under these clauses is the Central Electricity Regulatory Commission (CERC) or SERC, depending on the PPA. As is the case with most Indian quasi-judicial and judicial authorities, the proceedings are tedious and protracted.[212]

Rights without a remedy are meaningless and show the importance of arbitration, as many CAL applications remain without remedy for over 18 months. For example, CAL applications by RE investors affected by the Safe Guard Duty on imported Solar Panels, which was notified in August 2020, were only able to get a remedy in 2023 at CERC.[213] Anyone familiar with the Indian justice system would agree that access to it is hardly a remedy, with significant delays, unenforceability and costs.[214]

3.3. Summary

This Part continued the discussion from the last part. While the last part explained the role of IIL in protecting the investment, this part elaborated on the measures taken by the government, which may be the subject of IIL (assuming that the investors are foreign nationals). This Part also emphasises that without IIL, the current landscape remains riddled with issues such as the unenforceability of contracts, renegotiation of PPAs and tedious procedures for getting a remedy. All of this combined makes India an unsuitable destination for foreign investment in RE projects.

[212] Gopal, *Appraising the Change in Law Clause* (n 204) 6; See also Sumit Jha, 'Solar Developers are Struggling to Receive Compensation Under Change in Law' (*Mercom*, 22 November 2022). https://www.mercomindia.com/solar-developers-compensation-under-change-in-law. Accessed 10 November 2024.
[213] *Solar Energy Corporation of India Limited v MP Power Management Co. Limited*, CERC Petition No. 168/MP/2021.
[214] Yashomati Ghosh, 'Indian Judiciary: An Analysis of the Cyclic Syndrome of Delay, Arrears And Pendency' (2018) 5(1) *Asian Journal of Legal Education* 21.

Given the lack of public and domestic climate finance and unachievable NDCs without significant international private finance, this analysis shows the grim reality of India's climate mitigation law and RE policy.

4. Recommendations for further research and conclusion

This paper has analysed in detail the role of climate finance in climate mitigation and adaptation efforts, focusing on RE. Despite the promises, there is a clear lack of public and concessional finance, which underscores the importance of private finance, especially in a country like India. India requires vast resources to take adequate climate action due to the speed and scale of its development. Given the lack of public and concessional finance, private finance is the only available option. Analysis of climate finance flows suggests that India does not have adequate resources to achieve its NDCs. NDCs, which, even if achieved, are inadequate to avoid catastrophic climate change.

This paper, therefore, seeks to analyse the issue of private investment in India, focusing on the RE section while evaluating IIL as a solution. Based on the issues discussed, this paper recommends that India must reevaluate its stance on IIL. However, this re-evaluation only represents a contributory and not a sufficient precondition for a just climate transition in India. IIL imposes significant burdens on the host state; therefore, re-evaluation without strengthening contractual stability and enforceability, improving dispute resolution mechanisms and enhancing the transparency of the regulatory procedure would be counterproductive and downright disastrous. ISDS only punishes and discourages poor governance; at the same time, it has no role in ensuring good governance. As Dr Ranjan writes,

> A very large proportion of ISDS claims against India is due to poor governance. This includes changing laws retroactively (which led to Vodafone and Cairn suing India), annulling agreement in the wake of imagined scam (taking away S-band satellite spectrum from Devas), and the judiciary's fragility in getting its act together (sitting on the *White Industries* case for enforcement of its commercial award for years).[215]

However, it must be acknowledged that while India's ISDS claims may have arisen out of poor governance, ISDS tribunals have done a very poor job of discerning between legitimate and arbitrary actions which negatively affect foreign investment.[216] Therefore, not only poor governance but legitimate democratic governance could also result in an ISDS claim.[217]

It is paramount that more diverse voices engage with this complex and necessary interaction. Further research into the conflict between federalism and international obligations would be timely.[218] Apart from this, diverse contributions to now burgeoning literature on whether it is fair to burden developing countries to take climate action without the support of concessional

---

[215] Prabhash Ranjan, 'A BIT to Review' (*The Hindu*, 11 January 2022). https://www.thehindu.com/opinion/op-ed/a-bit-to-review/article38225318.ece. Accessed 10 November 2024.
[216] *See Rockhopper Italia S.p.A., Rockhopper Mediterranean Ltd, and Rockhopper Exploration Plc v Italian Republic*, ICSID Case No. ARB/17/14; Stephan W Schill and Vladislav Djanic, 'Wherefore Art Thou? Towards a Public Interest-Based Justification of International Investment Law' (2018) 33 *ICSID Review* 29; Vera Korzun, 'The Right to Regulate in Investor-State Arbitration: Slicing and Dicing Regulatory Carve-outs' (2017) 50 *Vanderbilt Journal of Transnational Law* 355; Andreas Kulick, *Global Public Interest in International Investment Law* (Cambridge University Press 2012) among many others, and Tanaya Thakur, 'Reforming the Investor-State Dispute Settlement Mechanism and the Host State's Right to Regulate: A Critical Assessment' (2021) 59 *Indian Journal of International Law* 173.
[217] ibid. Also see David Schneiderman, *Constitutionalizing Economic Globalization: Investment Rules and Democracy's Promise* (Cambridge University Press 2008).
[218] See generally Hans J Michelmann and Panayotis Soldatos (eds), *Federalism and International Relations: The Role of Subnational Units* (1990).

finance,[219] or whether certain countries have a historical responsibility due to their disproportionate contribution to climate change are also encouraged.[220] On the ISDS front, engagement with the current reform debate,[221] the tension between investor and public interest[222] and harmonisation between various international regimes is also encouraged.[223]

---

[219] For a good overview see generally Pieter Pauw et al., *Different Perspectives on Differentiated Responsibilities: A State-of-the-Art Review of the Notion of Common but Differentiated Responsibilities in International Negotiations* (Discussion Paper No 6/2014, 2014).

[220] For a critical perspective on an otherwise accepted idea see Alexander Zahar, 'Historical Responsibility for Climate Change in Historical Perspective' (2022) 40 *Essays in Economic & Business History* 210.

[221] There is a lot of scholarship on this topic. For a good introduction, see Steffen Hindelang and Markus Krajewski (eds), *Shifting Paradigms in International Investment Law: More Balanced, Less Isolated, Increasingly Diversified* (Oxford University Press 2016).

[222] See *Rockhopper Italia S.p.A., et al. v. Italian Republic* (n 216); Schill and Djanic, 'Wherefore Art Thou?' (n 216); Korzun, 'The Right to Regulate in Investor-State Arbitration' (n 216); Kulick, *Global Public Interest in International Investment Law* (n 216); Thakur, 'Reforming the Investor-State Dispute Settlement Mechanism and the Host State's Right to Regulate (n 216).

[223] For an introduction, see Julien Chaisse, Leïla Choukroune, and Sufian Jusoh, 'Regimes Interactions: International Law Investment and…–An Introduction' in Julien Chaisse, Leïla Choukroune, and Sufian Jusoh (eds), *Handbook of International Investment Law and Policy* (Springer Singapore 2021); *See* also Baltag and Dautaj, 'Promoting, Regulating, and Enforcing Human Rights Through International Investment Law And ISDS' (n 81).