

Development and Future of Energy Transition: Analyzing the Legal Landscape



Editorial Board RGNUL Student Research Review Rajiv Gandhi National University of Law, Punjab

CALL FOR PAPERS

The RGNUL Student Research Review **invites submissions for Volume 9, Issue 1**, from academicians, practitioners, legal luminaries and students on the theme titled:

"Development and Future of Energy Transition: Analyzing the Legal Landscape"

The energy industry fuels economies all around the world and has a significant impact on other sectors including the investment, environment, technological innovation, and international commitments, among others. Presently, the challenge plaguing the industry is regarding the reduction of our dependence on fossil fuels while ensuring that everyone has access to reliable and affordable energy alternatives. However, this energy transition will require considerable contributions from all stakeholders, including local communities, NGOs, corporations, governments, and academic researchers, among others.

India has consistently prioritized this issue of green and clean technology adoption as a national goal. It has implemented numerous national² and international initiatives to accomplish its objectives of achieving energy efficiency, clean fuel, international sustainable goals, decarbonization, etc., through affirmative actions in the infrastructural sector, investment sector, and human resource sector, among others.³ Further, in accordance with SDG Goal 7, which aims at affordable, reliable, sustainable and modern energy to all, the Indian Prime Minister made a commitment to make India energy independent by 2047.⁴ The Ministry of New and Renewable Energy ("MNRE") introduced a programme called "New Frontiers: A Programme on Renewable Energy" that focused on India's commitments and accomplishments in the energy transition, the

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¹ 'Why does energy matter?' (*UN Environment Programme*) < https://www.unep.org/explore-topics/energy/whydoes-energy-matter> accessed 31 August 2022.

² 'Steps by Government of India to promote renewable energy in the country' (*Press Information Bureau*, 21 July 2022) https://pib.gov.in/PressReleaseIframePage.aspx?PRID=1843538 accessed 31 August 2022.

³ 'The Evolving Energy Landscape in India' (*Deloitte*) < https://www2.deloitte.com/in/en/pages/energy-and-resources/articles/the-evolving-energy-landscape-in-india.html accessed 31 August 2022.

⁴ Juhi Jain and Siddhey Shinde, 'A Green India for all: An aspiration' (*NITI Aayog*) < https://www.niti.gov.in/green-india-all-aspiration> accessed 01 September 2022.

citizen-centric nature of the transition, etc.⁵ It further emphasized how crucial it is to electrify the economy and raise the proportion of renewable energy.⁶

Further, the Union Budget for 2022-23⁷ also incorporated certain renewable energy practices which shows India's commitment to introducing new green technologies and increasing the access of the people to the same. For instance, it presents a battery swapping policy for electric vehicles in order to fix the logistical issues in constructing charging stations all over the country. It was also pointed out in the Budget that the incorporation of Green Energy into the Indian ecosystem could go a long way in providing a sustainable development strategy. Lastly, the Budget mentioned the adoption of the Energy Service Company ("ESCO") business model for the purpose of fulfillment of energy contracts and certain other procedures related to verification. This model essentially prescribed the existence of a company that has its niche expertise in the domain of energy conservation.

In relation to the investment arena, in the last seven years, over USD 70 billion investment has been made in the renewable energy sector in India.⁸ According to a recent report by the Institute for Energy Economic and Financial Analysis, India has received record-breaking investment in the renewable energy sector amounting to \$14.5 billion (2021-22), which is 125% higher than the previous year.⁹ However, the same is not sufficient. To meet the 2030 target, India needs an investment of around \$225-250 billion.¹⁰ There is a need for a green domestic policy mapped with foreign direct investment ("FDI") and trade to improve productivity and energy efficiency.¹¹ This

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⁵ 'High-Level Dialogue on Energy' (*United Nations*, 24 September 2021) < https://www.un.org/en/conferences/energy2021> accessed 31 August 2022.

⁶ 'NEW FRONTIERS: A Programme on Renewable Energy' (*Press Information Bureau*, 10 February 2022) https://pib.gov.in/PressReleasePage.aspx?PRID=1798856> accessed 01 September 2022.

⁷ Finance Act 2022.

⁸ 'Renewable Energy' (*Make In India*) < https://www.makeinindia.com/sector/renewable-energy> accessed 01 September 2022.

⁹ Vibhuti Garg, 'Record US\$14.5 billion investment in Indian renewable energy sector in last financial year' (*Institute for Energy Economics and Financial Analysis*, 09 June 2022) < https://ieefa.org/articles/record-us145-billion-investment-indian-renewable-energy-sector-last-financial-year accessed 01 September 2022.

¹⁰ 'India needs \$225-250 bn investment to meet its 2030 renewable energy target: Moody's' (*The Economic Times*, 13 June 2022).

 $< \underline{https://economictimes.indiatimes.com/industry/renewables/india-needs-225-250-bn-investment-to-meet-its-2030-renewable-energy-target-moodys/articleshow/92173747.cms> accessed 01 September 2022.$

¹¹ 'Research suggests regulation to improve energy efficiency in manufacturing sector' (*The Hindu*, 13 May 2022) <thehindu.com/news/national/tamil-nadu/research-suggests-regulation-to-improve-energy-efficiency-in-manufacturing-sector/article65410216.ece > accessed 31 August 2022.

can only be achieved by favorable laws and policies of the government, which simultaneously balance the socio-economic needs of the country.

Therefore, it can be deduced that over the years, India has made a number of advancements in its clean energy transition, including its nationally mandated objective of increasing the country's renewable energy capacity. However, this journey of energy transition was recently halted by the sudden outbreak of COVID-19. On the one hand, India's greenhouse gas emissions have decreased for the first time in four decades as a result of the decline in fossil fuel use brought on by decreased demand in the electricity, transportation, and industrial sectors during these times. On the other hand, India is facing a number of difficulties including financial constraints, a lack of supplies, slowing down of project development, and cancellation of numerous projects among others. ¹² In view of these issues, the Government took various initiatives which included giving a Must-Run status to renewable energy projects, ¹³ MoP extending the waiver of inter-state transmission system charges and losses on all solar, wind, and hybrid projects, with or without energy storage, commissioned before 30 June 2023, 14 notification of The Electricity (Rights of Consumers) Rules, 2020 dealing with the rights of power consumers to minimum standards of quality and obligations of distribution licensees, 15 and the introduction of the Green Hydrogen Policy, 16 among others. Even though these policy actions appear positive on paper, only thorough analysis and research can evaluate their effectiveness in practice.

Apart from India, several other nations have upgraded their energy policies in an effort to actively participate in the current energy transition movement. For instance, the US Senate has recently approved the Inflation Reduction Act of 2022.¹⁷ One of the objectives of this Act is to make the USA world leader in clean energy investments.¹⁸ The European Union ("EU") has also adopted

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¹² NITI Aayog and Rocky Mountain Institute, 'Towards a Clean Energy Economy: Post-COVID-19 Opportunities for India's Energy and Mobility Sectors' (2020) < https://www.niti.gov.in/sites/default/files/2020-06/India_Green_Stimulus_Report_NITI_VF_June_29.pdf> accessed 01 September 2022.

¹³ Ministry of New and Renewable Energy, "Must-Run' for Renewable Energy Generating Stations (2020).

¹⁴ Ministry of Power, Waiver of Inter-state transmission charges on transmission of the electricity generated from solar and wind sources of energy- Amendment thereof (2021).

¹⁵ Electricity (Rights of Consumers) Rules 2020.

¹⁶ Green Hydrogen Policy 2022.

¹⁷ Inflation Reduction Act 2022.

¹⁸ Akriti Sharma, 'The New U.S. Bill on Climate Action' (*The Hindu*, 12 August 2022) < https://www.thehindu.com/news/international/explained-the-new-us-bill-on-climate-action/article65753611.ece accessed 01 September 2022.

the "Fit for 55", which is a set of proposals to revise and update the existing EU legislation to reduce greenhouse gas emissions by at least 55% by 2030.¹⁹ It has also aligned the taxation of energy products and electricity with the environment and climate policies by granting exemptions, structuring the rates, etc. Further, Japan through its "Invest In Kisida" plan has aimed to facilitate the transition to clean energy and achieve a 46% reduction in greenhouse gas emissions by 2030.²⁰ Additionally, India and Japan are working together on a carbon reduction document for sustainable growth.²¹ The Government of Canada has also launched the second round of public engagements to formulate the Clean Electricity Regulation.²² These global efforts show that clean energy transformation is the need of the hour, and every country must not only develop policies but also ensure their success by way of effective implementation.

Due to the fact that energy transitions are surging at a rapid rate, disputes also occur around the world because of numerous transactions taking place in industries like biomass and coal-based technologies, hydropower actions, solar and wind related functions, etc.²³ Arbitration has been the dominant mode of dispute resolution in these sectors, owing to the fact that a substantial amount of transactional work which takes place in these industries relates to cross-border international transactions. But there are some problems with this system which include the increasing complexity of the process of arbitration, especially in energy-based disputes considering the public impact of energy-based activities on the environment in general. Further, the increasing costs of arbitration now have come at par with litigation which defeats the whole purpose for people

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¹⁹ European Green Deal, 'Fit for 55' (*Council of the European Union*, 29 June 2022) < https://www.consilium.europa.eu/en/policies/green-deal/fit-for-55-the-eu-plan-for-a-green-transition/> accessed 01 September 2022.

Akriti Sharma, 'The New U.S. Bill on Climate Action' (*The Hindu*, 12 August 2022) https://www.thehindu.com/news/international/explained-the-new-us-bill-on-climate-action/article65753611.ece accessed 01 September 2022.

²¹ 'Japan to offer India \$42 bn in investments during Kishida's visit: Report' (*Business Standard*, 19 March 2022) https://www.business-standard.com/article/economy-policy/japan-to-offer-india-42-bn-in-investments-during-kishida-s-visit-report-122031900471_1.html accessed 01 September 2022.

²² 'Government of Canada launches second round of public engagements to establish the Clean Electricity Regulations' (*Environment and Climate Change Canada*, 26 July 2022) < https://www.canada.ca/en/environment-climate-change/news/2022/07/government-of-canada-launches-second-round-of-public-engagements-to-establish-the-clean-electricity-regulations.html> accessed 01 September 2022.

²³ WIPO Alternative Dispute Resolution (ADR) for Energy < https://www.wipo.int/amc/en/center/specific-sectors/energy/>.accessed on 03 September 2022.

resorting to arbitrations.²⁴ The world may have to cope with these intriguing new trends of arbitration in the energy sector in the near future.

In light of the national and global legal and regulatory trends in the energy transition domain, RSRR seeks to delve into the theme, "Development and Future of Energy Transition: Analyzing the Legal Landscape" to review and analyse the present legal and policy framework in light of the everyday developments in the energy sector. The primary objective behind this theme is to provide a platform for legal analysis, insightful commentary, and in-depth analysis that can bridge the gap between pertinent legal developments in the energy sector and the likelihood of their actual implementation which, in turn, will improve the discourse about such contentious issues of the energy transition phase.

²⁴ Gordon E. Kaiser, 'Conclusion: The Challenges Going Forward' (2022) GAR <<u>https://globalarbitrationreview.com/guide/the-guide-energy-arbitrations/fifth-edition/article/conclusion-the-challenges-going-forward</u>> accessed 02 September 2022.

SUB-THEMES

- I. Mapping India's Policy Landscape: Emerging Focus on Renewable Energy
 - 1. Green Hydrogen Policy, 2022: A Solution to Power Security?
 - 2. Energy Conservation (Amendment) Bill, 2022: An Attempt to Fulfill India's Ambitious Global Goals?
 - 3. Administrative Reforms in the Electricity Appellate Tribunals, and the Electricity Contract Enforcement Authority
 - 4. National Renewable Energy Legislation: Need of the Hour?
- II. Disruptive Practices in the Energy Sector: A Legal Analysis
 - 1. Creating a Domestic Carbon Credit Trading Market and Empowering Indian Issuance of Carbon Trade Certificates
 - 2. Carbon Credit Export Policy of India: India's Learning from Other Nations
 - 3. The Legality of Carbon Farming in India: Need for a Regulation
 - 4. Need for Comprehensive Legislation for the Governance of Electric and Battery Operated Vehicles
 - Ensuring Equity and Sustainability in Agriculture: Integration of Solar Practices into Current Agricultural Trends
- III. Global Energy Transition Outlook: Lessons for India?
 - 1. The US Inflation Reduction Act: Economy, Energy, and Environment
 - 2. EU's "Fit for 55": A Frontrunner in Renewable Energy Transitions
 - International Agreements and Transition Goals: The Credibility of Promises
- IV. Mapping the Commercial Domain of Energy-Based Transactions
 - Governing the Increased Anti-Competitive Conduct in the Power Sector:
 An Industry-Based Legal Analysis
 - 2. Structural and Behavioral Remedies for Competitive Bidding in Wind and Solar Power Sector
 - 3. Simplifying the Application of GST in the Energy Sector: Preparing an Optimal Taxation Structure
 - 4. A Legal Analysis of Insurance Policies in the Project, Infrastructure, and Energy sectors

- 5. Tracing the Current FDI trends in the Energy Sector: Analysis of the Indian Legal Structure
- V. <u>Understanding Consumers Stance in the Energy Transition Model</u>
 - 1. Electricity (Rights of Consumers) Rules, 2020: Role of Prosumers
 - 2. Energy Poverty and the SDG Goal 7: The Balance between Tall Claims and Consumer Reality

Note: The above-mentioned sub-themes and sub-points **are only illustrative and not exhaustive**, and the authors are free to write upon any other sub-theme, provided it falls within the broad ambit of this Journal's theme.

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- I. All manuscripts submitted must be original and should not have been published elsewhere,
 to be considered for publication in RSRR.
- II. All manuscripts will be checked for <u>plagiarism</u>. If plagiarism is detected, the Editorial Board reserves the right of rejection without a review of the manuscript.
- III. The manuscript should not contain the name(s) of the author(s), their institutional affiliations, or any other identification markers. The title of the manuscript should indicate the sub-theme that the author(s) have chosen.
- IV. Upon submission, every manuscript will undergo an internal review by the Board of Editors. If approved, it is subject to a double-blind peer review process.
- V. Authors must note that grammatical and legal accuracy, contribution to literature (originality of content), etc. will be some of the major criteria on which the submissions will be analysed. The responsibility for the accuracy of the facts, opinions, or viewpoints stated in the submitted paper shall rest solely with the author(s).

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Submission Categories

The RSRR invites papers under the following categories:

I. **Articles** (5,000 to 10,000 words):

A comprehensive and thorough analysis of issues related to the theme of the Journal.

II. **Short Notes** (3,500 to 5,000 words)

A note containing brief, terse and pointed arguments revolving around a specific, current issue or an issue of importance which may have not received due research.

III. Case Comments (2,000 to 4,000 words)

An academic writing that analyses or is a critique of a recent case.

IV. **Legislative Comments** (2,500 to 4,000 words)

A comment that analyses the objective of the legislation and analyses the legal impact of the same.

V. **Normative Law Articles** (3,000 to 5,000 words)

These will explore the opinion of students relating to the specific legislations involved in the theme of the Journal. They seek to bring out a student's view on how a particular legislation or legislative provision should have been drafted to bring out clarity into the law. The authors are welcome to draft amendments (or even a law in entirety) to the existing laws should they believe that the particular legislation requires some amendments. Arguments must be logical and can take into account aspects such as sociological, political, and economic implications of the law.

Instructions for Authors

- I. All submissions must be in Garamond, font size 12, spacing 1.5.
- II. All footnotes shall be in Garamond 10, single-spaced and should conform to the Oxford University Standard for Citation of Legal Authorities (OSCOLA) mode of citation.
- III. Margins: Left 1 Inch and Right 1 Inch, Top 1 Inch and Bottom 1 Inch (A4).
- IV. The word limit is exclusive of all the footnotes.
- V. Co-authorship is allowed up to 2 authors.
- VI. All submissions must include an abstract of a maximum of 250 words.
- VII. All submissions must be accompanied with a cover letter in a separate document stating the details of the author(s).
- VIII. All entries should be submitted in .doc/ .docx format only.
 - IX. The author(s) bear sole responsibility for the accuracy of facts, opinions or views stated in the submitted paper.

Submission Deadline

The deadline for final paper submission, inclusive of the abstract, is 19th November 2022, by 11:59 P.M. (IST).

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Additionally, RSRR also runs its Blog Series, which deals with specific contemporary issues of law. The RSRR Blog Series has been named one of the top 25 Constitutional Law Blogs internationally by Feedspot consecutively for three years. As a part of the RSRR Blog Series, the Excerpts from Experts Blog Series has been initiated, under which professionals and experts are invited to critically analyze and foster academic discussion on contemporary and unexplored legal issues. We have had the pleasure of receiving notable contributions from luminaries such as Prof. (Dr.) Upendra Baxi, Dr. Sairam Bhat, Mr. Ajar Rab, Ms. Radhika Dubey and Mr. Aman Singhania, Mr. Abir Lal Dey among others.

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RSRR has previously collaborated with firms and organisations for various Blog Series as well as past editions of the journal.

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