



## **THEME: LAW AND POLICY RELATING TO GREEN ENERGY**

### **CRITICAL ANALYSIS OF EMERGING GREEN ENERGY LAW; FORESTS AND LIVELIHOODS; SUSTAINING PEOPLE AND PLANET**

**Author 1 Mentor:** Dr. Legha Mamta Ranjit Singh, Assistant Professor, School of Law, GD Goenka University, Gurugram

**Author 2:** Ms. Airemy Tanings, Bachelor of Medical Radiology and Imaging Technology

**Author 3:** Mr. Aryan Tandon, B.COM (H)

**Author 4:** Mr. Dev Chhillar, B.Sc. (Hons.) Forensic Science

**SUSTAINABLE GOAL:** Goal- 15, Life on Land

---

**ABSTRACT:** The world benefits from India's accelerated shift to sustainable energy. India is committed to achieve net zero emissions by 2070. Further, it intends to fulfil half of its electricity need from renewable sources by 2030. The primary objective of shifting to the renewable energy in India is not only mitigating the climate change but also to achieve sustainable development by ensuring access to cheap, viable, and environment friendly energy to its people. This dedicated effort by Indian government marks a turning point in the global arena to combat climate change. Since the launch of 'National Action Plan on Climate Change, 2008' (NAPCC), India has emerged as the most attractive market for investment in renewable energy. Conducive environment for investment coupled with innovative Policies and programs in the renewable energy sector has also helped in



drawing Foreign Direct Investment. Owing to this concerted efforts 'Renewable Energy Sector' has helped in creating a large number of domestic jobs which will increase over the coming years. National Solar Mission programme which is a part of part of National Action Plan on Climate change (NAPCC) aims at developing the solar energy to meet the ever-increasing demand of energy and also to a gradual and viable transition to renewable energy sources. Despite all these dedicated efforts, the overall share of Green Energy is negligible; therefore, it is essential to examine issues which are impediments to the its growth. Renewal Energy is part parcel of Energy Sector and therefore, it is governed under the provisions of the Electricity Act for the purpose generation, transmission, distribution, trading and use of electricity. This paper aims to analyse significance, prospects vis-a vis challenges ahead before Green Energy Sector. Paper also tries to examine the efficacy of the existing laws and emerging legal jurisprudence governing Green Energy. The study will prove a useful tool in the hands of stakeholders viz, Legislator, industrialist, investors as well as Green Energy producers.

**KEYWORDS:** *Solar Energy, Green Energy, Renewable energy, Policies, Climate, Foreign Direct Investment, Recommendations, Employment, Legislators, Investors*

## **INTRODUCTION**

Renewable energy is the means through which we may invest in our future as we move towards a clean energy. The term "renewable energy" describes power produced from renewable resources such the sun, wind, and water. They aid in lowering environmental pollutants and are comparatively clean. Major contributions to environmental pollution include other energy sources such as fossil fuel. The countries are aware that switching to renewable energy is necessary since non-renewable sources won't be available for future need. There is no better option for producing energy than renewable sources. India is one of leading producers of this green energy in the world and has begun focusing on developing its renewable energy sources. They have put in place a number of laws and regulations to support renewable energy sources. The actions are also being taken



internationally. The International Solar Alliance (ISA), which strives to promote solar energy around the world, was primarily founded by India and France. For a brighter future, the globe is attempting to develop new, clean, and renewable energy sources. Policies and governance on energy resources are necessary to address the issues of rising energy consumption and environmental damage. A systemic shift towards more effective energy regimes necessitates a well-planned series of operations involving all political spheres, from the local to the international arena. India is producing 150GW of renewable energy, out of which half is coming from solar, cogeneration potential, and waste-to-energy, and the other half from small hydropower, biomass, and wind. India may achieve its objectives for leadership in high-tech sectors by increasing its energy security, minimizing negative effects on the local environment, reducing carbon intensity, and contributing to more balanced regional growth. To promote the development of Renewable Energy sources in the nation, the government has created a number of measures. These regulations primarily take the form of financial aid, tax breaks, or unique orders designed to promote renewable energy. The goals established for 2022 are continuously being worked towards by the policies. The Ministry of New and Renewable Sources of Energy (MNRE) is entrusted with the task of managing the policy initiatives.

## **REVIEW OF LITERATURE:**

*India \_Green Stimulus Report NIT! VF JuneQ9.pdf*: The series' main goal is to provide information on how nations all around the world might use stimulus and recovery funding to improve their economies following the COVID-19 crisis and move closer to the future that is cleaner, wholesome, healthier, equitable, and more buoyant for the mother planet which we all share. The reports offer an agenda for organizing and assessing stimulus initiatives as well as suggestions for environmentally friendly stimulus and recovery spending as well as specific actions for the United States, China, India, sub-Saharan Africa, and the Caribbean that can help rebuilding efforts in these nations and regions to the fullest extent possible.



The Renewable Energy Law Review - The Law Reviews (An article on The Renewable Energy Law Review: India: In India, the Electricity Act, 2003 is the primary legislation which also covered renewable energy (RE). While the Electricity Act 2003 itself does not define Renewable Energy, other regulations have done so. For example, The central electricity regulatory commission (CERC).

Towards Green Energy Transition (drishtias.com) It speaks about challenges relating to renewable energy transition and suggest ways and means to tackle the problem. As observed from covenant and instruments for mitigation of climate change, all stakeholders are committed to achieving the goal of net zero pledge.

## **RESEARCH GAP:**

Institutional and Policy-level Complicacies and Uncertainties: Energy find place in the concurrent list. This constitutional position of energy is a cause of concern as effective implementation any policies or regulations require coordinated effort at the federal and provincial level which, to a large extent depends on political environment. Thus, mobilization of necessary funds is an issue which depends on political will. The lack of coordination and political will is reflected in various policy announcements made by provincial organizations.

Combining Renewable Energy Sources Under the Cover Of the Energy Sector; The renewal energy has been included as a component of the power industry. Such inclusion is causing certain financial issues. The electricity industry is still plagued by a number of problems, despite the Government of India's best efforts to stop these distortions through creative policy initiatives like the UjwalDiscom Assurance Yojana (UDAY) plan, which aims to improve the sector's financial health. Through on-going reforms, it is essential to improve the creditworthiness of power distribution companies. Furthermore, the renewable energy should be a separate sector.



More study of use of green energy sources in rural India; Additional research on the use of renewable energy sources in rural India is needed, as we were unable to find any meaningful information about their status there. This is crucial because, when taken into account over a long period of time, the effectiveness of methods may change significantly.

## **RESEARCH METHODOLOGY**

As the study is essentially doctrinal in nature, the library method is followed. The available materials in the form of books, research articles, debates, commentaries, legislation of parliaments of India as also case laws are analytically examined. Relevant literature from materials available on relevant websites is also be made use of for the purpose of this study.

## **HYPOTHESIS**

A well-defined Regulatory framework is essential for the purpose generation, transmission, distribution, trading and use of electricity produced through renewable sources the legal system have no connection. Presently, renewable energy is not subject to any legal framework. Therefore, there is a need of strong regulatory framework. In the absence of legal fram3work, the growth of renewable energy is negatively impacted.

## **OBJECTIVES:**

A shift to clean energy is about making investments in our future and finding ways to use renewable energy to do so:

- To properly use the nation's latent renewable resources, a comprehensive plan on renewable energy is required, including supply and consumption as well as appropriate transportation - The administration should endeavour to increase the nation's use of bioenergy.



- To ensure that the rules implemented for utilizing the potential of renewable energy are effective. Concerted and dedicated coordination between the federal and state governments as well as between distribution firms and producers is a pre requisite for augmenting the share of renewable energy.
- To ensure the efficacy of the policies for utilizing the potential of renewable energy, coordination of various stakeholders is necessary.

## **LIMITATIONS**

There are challenges and impediment for the growth of green energy in India. In addition to the lack of proper and efficient mechanism for effectively implementing the policies, there is also lack of coordination between the policymaker and those responsible for implementing the same. Resultantly, there is a slow growth of renewable energy in India. Certain other issues which are not congenial to the healthy growth is enumerated hereunder:

- i] Majority of the power plants are obsolete and overused and thus, lacking efficiency in generating electricity;
- ii] Import duties solar modules is too heavy. Thus, the import of solar panel is not cost effective. The rationale behind higher rate of duty is to give protection to the domestic solar manufacturing industry. However, the higher rate of duty has neither deterred the import of solar panel nor proved helpful in improving the competitiveness of local manufacturers of solar cells.
- iii] Energy being in the concurrent list, there is a need of coordination between the federal and provincial government in the matter of land acquisition for installation of solar panels, transmission connection issues. However, it has been experienced that there is lack of coordination resulting in slow growth of green energy.
- iv] Financial constrained is another factor responsible for slow growth of renewable energy.



## LEGISLATIVE FRAMEWORK

- 1.1 The Electricity (Amendment) Bill, 2018: Electricity Act, 2003 do not define 'Renewal Energy'. The deficiency was made up by way of The Electricity (Amendment) Act, 2018. Under the Act, all the stations generating electricity through coal are required to switch over to renewable energy. Failure to do so will be liable for penal action. The Act also enjoins upon the policymaker to devise National Renewable Energy Policy.
- 1.2 The draft Electricity (Amendment) Bill, 2020: Under the Bill it is proposed to set up an Authority for resolving the disputes arising out of implementation of the contracts pertaining to the sale, purchase, and transmission of electricity.
- 1.3 Renewable Energy Act, 2015: This Act provides for establishment of a committee to be called National Renewable Energy Committee. The committee is to facilitate inter-ministerial coordination to ensure expert assistance. The draft was released by Ministry of New and Renewable Energy.

## FINDINGS:

The pilot study (field work), which was conducted to assess the application of the green energy law and the usage of various green energy sources in the vicinity of the town of Sohna (Gurugram) and Palwal, yielded one of the main conclusions of this research paper. We divided the region into two categories—rural and urban—to facilitate learning and make the task easier. We asked roughly 15 folks we interviewed to complete the questionnaire.





## RESULT

By 2030, our Indian government intends to build a 523 GW capacity for renewable energy, including 73 GW from hydro. In July, 2021, India had 96.96 GW of installed capacity for green energy which accounts for 25.2% of all mounted power capacity and gives a significant possibility for the growth of renewable energy. We can see solar panels on the roof in neighbourhood. However, this accounts for a small number of well people belonging to higher strata. 80% of the rural population is unaware of the green energy law,





let alone the various sources. The most popular green energy sources are solar panels and the most commonly used green energy source i.e., biomass in form of cow dung and many people in rural area use cow dung as fuel to cook their food and for other purposes. The biggest obstacle to renewable energy is the low production and higher cost rendering it unviable and inefficient. The higher cost is associated with building and installing facilities like solar or wind farms. We encouraged people to make changes in their day-to-day lifestyle and made them aware about how their small step can change the future of green energy law and how it can impact our environment both in a positive and negative sense. People were encouraged, and the pros and cons of the same issue were discussed. Individuals become overly active as a result. Our pilot research was a success thanks to everyone who took part, cooperated, and helped raise awareness about the issue in the community. As students, it also allowed us to learn about the real-world issues that others encounter in connection with the same issue.

## **CONCLUSION**

The Indian government is aiming to achieve its goal to increasing the country's proportion of renewable energy. The goals of the policies are to reach the objective with this decade. The MNRE is continuously trying to put the policies into effect. Several problems need to be resolved. They can be easily overcome, though, if the right steps are taken. The development of renewable energy has been seriously threatened by the lack of cooperation between state and federal agencies. This has to be rectified as soon as possible. The tariff rates set by foreign investors ought to be reviewed by the government. In order to guarantee effectiveness and quality, the renewable energy sector has to be competitive and privatized. In addition to the traditional solar and wind sources that have been present for a long, India has been considering alternative kinds of RE. Hydrogen, electric cars, storage projects, and RTC projects are a few examples of such innovative and intriguing RE applications. Although India's RE targets are undoubtedly ambitious, the government has been moving in the right direction with its policies, amendments, and subsidies to make sure that they are attainable. To sum up, India done a lot to augment the share of



renewable energy; however, a lot more is needed to do in order to make renewable energy as a major source of energy requirement. Given the efforts made at all level, there is no doubt that India will emerge as one of the pioneers in production and use of renewable energy. To us, "Renewable energy means to re-adopt our old Indian traditions which were successfully used by our great grandparents to fulfilled energy need without degrading environment".

## REFERENCES

<http://adb.org>.

<https://pib.gov.in/PressReleaselframePage.aspx?PRID=1785808>

<https://pib.gov.in/PressReleaselframePage.aspx?PRID=1785808>

<https://www.ijlmh.com/renewable-energy-laws-in-india/>

<https://www.mondaq.com/india/renewables/1297088/indias-commitment-to-cleanenergy-laws—regulations>

<https://knowlaw.in/index.php/2021/10/06/energy-laws-in-india-hunky-dory-or-humpty-dumpty/>

<https://timesofindia.indiatimes.com/india/india-jumps-73-spots-to-26-rank-in-wbs-power-list-goyal/articleshow/58670378.cms?from=mdr>

<https://www.pib.gov.in/PressReleseDetailm.aspx?PRID=1685046>

<https://mnre.gov.in/wind/current-status/>

[https://www.khaitanco.com/sites/default/files/2021-](https://www.khaitanco.com/sites/default/files/2021-01/2021_Renewable%20Energy_India.pdf)

[01/2021\\_Renewable%20Energy\\_India.pdf](https://www.khaitanco.com/sites/default/files/2021-01/2021_Renewable%20Energy_India.pdf)

<https://www.mondaq.com/india/renewables/1297088/indias-commitment-to-clean-energy-laws--regulations>