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**Green technology & innovation: its implications on the sustainable development
in Indian context**

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Abstract: One of the top trending areas of research and development in science and technology is green technological innovation. Its primary objective is to develop a sustainable innovation paradigm that would allow for the introduction and development of environmentally friendly inventions to aid in the alleviation of environmental plight and conservation of natural resources. Green technological innovations, also referred to as environmental technological and clean technological innovations, are primarily intended to cater to novel technological products and processes in to avoid dependence on conventional non-renewable energy sources like fossil fuels as well as to move toward the restoration of the health of the earth. Additionally, green technology innovation strives to meet the societal needs and amenities in a way by reducing the exploitation of natural resources and, as a result, conserves the environment. Given that India has one of the fastest growing economies in the world and a population of about 1.4 billion, the country's constant need for resources like energy, water, food, etc. is having a negative impact on the environment and the country's ability to curb the depletion of natural resources. As a result, efforts to develop green technologies are a necessary response to this problem. As a result, the present chapter is centered on the state of green technology innovation in India and its implications for accomplishing sustainable development goals while preserving the country's environmental health.

Key words: Green technology, innovation, renewable energy, environment, sustainability.

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**Зеленые технологии и инновации: их влияние на устойчивое развитие
в индийском контексте**

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Аннотация: Одной из наиболее перспективных областей исследований и разработок в области науки и техники являются «зеленые» технологические инновации. Основная цель – разработать устойчивую инновационную парадигму, которая позволила бы внедрять и развивать экологически чистые изобретения, способствующие улучшению состояния окружающей среды и сохранению природных ресурсов. Зеленые технологические инновации, также называемые экологическими технологическими и экологически чистыми технологическими инновациями, в первую очередь предназначены для удовлетворения потребностей в новых технологических продуктах и процессах, чтобы избежать зависимости от традиционных невозобновляемых источников энергии, таких как ископаемое топливо, а также двигаться в направлении восстановления здоровья земли. Кроме того, инновации в области зеленых технологий направлены на удовлетворение общественных потребностей и удобств за счет сокращения эксплуатации природных ресурсов и, как следствие, сохранения окружающей среды. Учитывая, что Индия обладает одной из самых быстрорастущих экономик в мире и населением около 1,4 миллиарда человек, постоянная потребность страны в таких ресурсах, как энергия, вода, продовольствие и т.д., оказывает негативное воздействие на окружающую среду и способность страны сдерживать истощение природных ресурсов. В результате усилия по развитию зеленых технологий являются необходимым ответом на эту проблему. В результате настоящая глава посвящена состоянию инноваций в области зеленых технологий в Индии и их последствиям для достижения целей устойчивого развития при сохранении здоровья окружающей среды страны.

Ключевые слова: зеленые технологии, инновации, возобновляемые источники энергии, окружающая среда, устойчивое развитие.

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Introduction

Many developing or underdeveloped countries are pursuing fast growth in many areas, including as infrastructure, industry, services, agriculture, and so on, as a result of the period of globalization and the increasing competition among nations to improve their own economic conditions. Numerous nations are being forced by this dire situation not only to exploit their ecosystems for scarce resources but also to damage their environment as a consequence of unsustainable growth. The majority of countries and regions are actually dealing with the challenge of promoting socioeconomic growth for the benefit of the people and of the nation as a whole while attempting to mitigate environmental degradation. As a result, many nations are prioritizing this challenge and attempting to achieve a balanced condition as well as conserve and restore finite resources for the sake of coming generations [1]. Indeed, a reliable, affordable energy supply is one of the essential prerequisites for the growth of any nation's socioeconomic sectors. In other words, the country's energy infrastructure plays a critical role in its economic growth. Since fossil fuels supply the majority of the world's commercial energy needs, the extensive use of such energy has had an adverse impact on the environment because of the toxic emissions that result from it [2].

Additionally, the finiteness and impending threat of fossil fuel depletion make it impossible to maintain continuous energy production in order to satisfy the world's rising energy needs while simultaneously reflecting the unfavourable and unsustainable effects on the environment. To realize the objective of a clean and sustainable environment, the supply of energy should be used more wisely and efficiently while also increasing the development, adaptability, and contribution of clean energy sources [3]. Though green energy has potential to become a credible replacement of conventional energy sources, currently only a meagre proportion of renewable energy is being produced and provided to satisfy the world's (commercial) energy demand due to a broken-thread connection [4]. Hence, efficient green innovative technologies would be a promising

way for tapping the potential of green energy and implanting its distribution in feasible and cost-effective manner. With the second-highest population and the fifth-largest economy in the world, India has significant energy needs to continue its rate of economic growth. The Indian context is extremely difficult due to the need to economically mitigate the effects of coal and crude oil, which are the main traditional fuel sources in the largest segments of the industries and the energy sectors. For this reason, creative solutions are needed to break the cycle of widespread adoption of current frugal practices in order to financially support sustainable practices. Therefore, it is essential that the nation increase its ability for technology adoption while also putting a greater emphasis on green technological innovation initiatives. In order to achieve the goal of green and sustainable socio-economic development through the green technological innovation initiative, it is important to adhere and enact on the green technology policy that provides a path and motivation based on four pillars to continuously enjoy good quality and a healthy environment [5]. Those four pillars are as follows.

- I. **Energy:** Seek to attain energy independence and promote efficient utilization.
- II. **Environment:** Conserve and minimize the impact on the environment.
- III. **Economy:** Enhance the national economic development through the use of technology.
- IV. **Social:** Improve the quality of life for all [6].

Background Study

An overview of Green Technology (GT): The phrase "green technology" (GT) refers to a broad spectrum of novel, innovative approaches to create significant improvement in daily living that are beneficial to the environment. Though it can be daunting to define exactly which domains fall under the purview of green technology, it is pertinent to say that "GT is the development and application of products, processes, and systems which used conserve the natural environment and its resources and strive to mitigate and lessen the adverse impact of human activities."

Green technology is that which should neither harm the environment or deplete natural resources while yet addressing societal requirements in a way that can last endlessly into the future [7]. Green Technology is described, in essence, as a development of eco-friendly technological innovations that satisfies current requirements without sacrificing the ability of the future generations to satiate their own wants.

Today, it is believed that green technology will bring about big, inventive changes in our modern lives on equal level with the 4.0 digital revolution. In order to encourage the use of green technology and the production of electricity from renewable sources, the Indian government has been offering several financial and educational incentives, such as tax exemption, cheap import duty, assessable R&D facility, public awareness and others.

Green technology is the understanding of how to preserve the environment, preserve resources, and minimize human participation. It has a wide range of applications, including biofuel, eco-forestry, renewable energy, and solid waste management [8]. Because it covers practically every area relating to human existence, green technology is a very broad field. The impact of the green technology initiative also differs depending on the socioeconomic and environmental condition of the countries where it is being used. As a result, selecting a suitable green technology might be tricky. However, there are few fundamental criteria has been designed to select green technology enabled innovative products and process. Moreover, these products and process much have to satisfy the criteria.

Green Technology refers to products, process or systems which satisfy the following criteria:

1. Technology should be able to lessens the degradation of the natural resources and environmental segments.
2. Technology must emit no or very little greenhouse gases (GHG) in order to be safe to use and foster a cleaner, healthier environment for all living forms.
3. Technology should be able to reduce its consumption of natural resources and energy.
4. Technology ought to take an integrated approach to renewable resources.

The following three major Objectives of Green Technology

Green technology has been received more attention from people and organizations looking to make initiatives that have a beneficial social and environmental impact. Green technology's main focus is renewable energy, but it also looks at a number of other scientific areas, such as hydrology, agriculture, material science, and energy. As was already said, it has far more extensive goals.

1. **Positive effect on the environment:** One goal of green technology is to lessen human impact on the environment, which benefits the environment. It is frequently grouped with renewable energy because of

this. Many green technology initiatives such as solar and wind energy target carbon dioxide and other greenhouse gas emissions with the intention of lowering or eliminating them [9].

2. **Improve the quality of life:** Without compromising, to fulfil current demands. Making products that are completely recyclable or reusable is now the main goal. One of the key objectives of green technology is the reduction of waste and pollution, which is being accomplished through altering patterns of production and consumption. This will provide healthier environments and improve people's quality of life.

3. **Be economically viable:** It must also be economically viable for a research project, scientific discovery, or investment opportunity to qualify as green technology. The national and international economies should benefit from sound investments in addition to the individual investors and businesses that make them for example the numerous chances for economic development and potential job creation that new sectors like 3D printing provide [9].

In short, the overall aim of green technology is to develop alternative technologies which should be eco-friendly, socio-economic favourable, and easily accessible for everyone.

An overview of sustainable development

The phrase "sustainable development" can be defined in a variety of ways, but at its foundation, it denotes to a method of growth that seeks to balance many, sometimes competing needs with an understanding of the social, economic, and environmental constraints that our society is subject to. In nut-shell "Sustainable development is development that meets the needs of the present, without compromising the ability of future generations to meet their own needs [10]. Economic Growth, Social Inclusion, and Environmental Protection must all happen at the same time in order for a development to be sustainable. These elements, all of which are interrelated, are essential to the welfare of individuals and society. The concept of sustainable development is regarded as a crucial research area by academics, researchers, government officials, and international organizations." Building an inclusive, sustainable, and resilient future for people and the planet requires coordinated actions [11]. Bossel (1999) provides definitions of the term "sustainable development" and "corresponding indicators of sustainability" to help define the concept of sustainability and provide a set of indicators that corresponds [12].

Methodology

A literature review has been conducted to understand about current methods employing by the government to implement green technologies and how they impact the environment and encourage environmental sustainability.

Discussion

Significance of green technology:

In the last couple of decades, green technologies have become increasingly appealing. The adoption of green technology seems to be our only possibility of survival since the planet's natural resources are drying out. The phrase green technology refers to all environmentally sustainable technology that doesn't damages or impair the natural environment or its resources. Green technology is not restricted to a certain number of technologies. Instead, It encompasses all technological innovations which are being created and developed via innovative approach, whether or not they have become widely popular.

The need for clean technology is clear in the face of the long persisting catastrophic effect of pollution, which claims the lives of about millions of people every year. In general, the significance of green technology rests in minimizing the dangers resulting from environmental deterioration and conserving natural resources. Green technologies can help to slow climate change since it makes use of cutting-edge energy production techniques while consuming less carbon. Green technology makes an effort to offer substitute energy sources that do not exhaust crucial fossil resources. It is important for reducing the emissions of greenhouse gases such as carbon dioxide and nitrogen, which will lead to slow down global warming [13]. By incorporating sustainable aspects into the play, green technology is also contributing to the construction sector. In addition to making a constructing more environment – friendly, this feature also increases its value. Although green buildings have a higher upfront cost, they pay off in the long run. Geothermal system installation, for instance, can be expensive but uses roughly 50 % less power than conventional systems. Geothermal pumps reduce carbon dioxide emissions by 70 % concurrently. While concurrently preserving the environment by conserving natural resources, it aids in lowering electricity prices [13].

Merely said, green technology is key for our future. The necessity and relevance for such a clean technology stem from the dismal scenario that pollution and climate change's imposed on us. Green technology

makes biodegradable goods easier to use, stimulates recycling, and supports the construction of sustainable structures. Additionally, it makes a big contribution to reducing pollution, slowing global warming, and protecting natural resources.

Feasible Green Technologies:

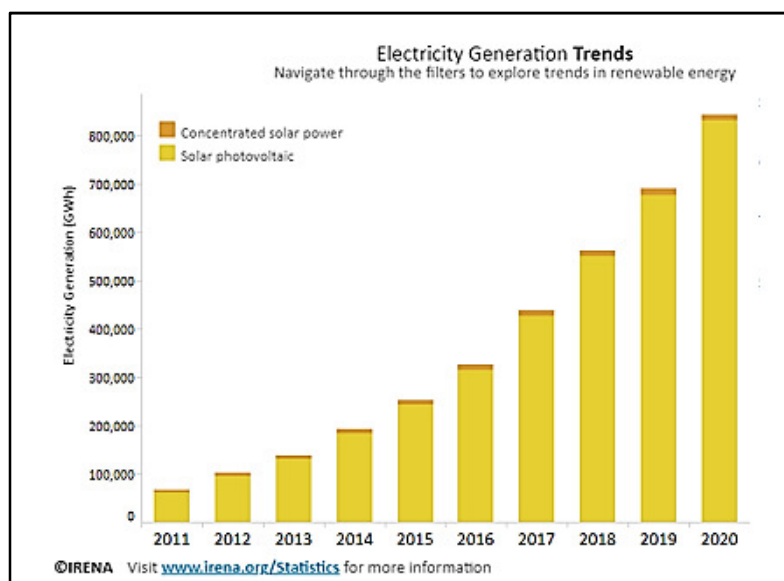
Some of the green technologies that are designed to save the environment and conserve natural resources include solar energy, wind energy, ocean energy, energy conservation, and bioremediation etc.

The following are a few of the popular renewable energy technologies and procedures:

1. Solar Energy (Concentrated solar power (CSP) / Solar Photo-voltaic Technology): The competition for renewable energy is seeing solar power emerge as a prominent player. At any given time, there is around 89 petawatts of electricity available, which is 6,000 times more than all of human civilization uses in a day. The amount of solar energy absorbed by the planet every 14.5 seconds is equivalent to what people use in a day [14]. Solar energy is being utilized more frequently to produce power, heat water, or purify it. There are two major techniques namely *Solar Photo-voltaic Technology (SPVT)* and *Concentrated solar power (CSP)* to transform solar energy into electric or other form of energy.

Solar Photo-voltaic Technology (SPVT) is a highly flexible technology that comes in a variety of sizes, from small solar home kits and rooftop installations with capacities of 3 to 20 kW to systems with capacities in the hundreds of megawatts. With help of SPVT electricity production has become more democratic. SPVT is being used to provide lighting solution. In addition, it may be utilized for communication, cooling, and battery charging [15]. Solar photovoltaic energy can be utilized as sustainable agricultural energy source for pest control, water pumping, and village street lighting.

Concentrated solar power (CSP) uses mirrors to concentrate solar rays. In order to turn a turbine and produce energy, these rays heat the fluid, which then turns into steam. In large-scale power facilities, CSP is utilized to produce energy. Global CSP installed capacity increased fivefold between 2010 and 2020 [16].



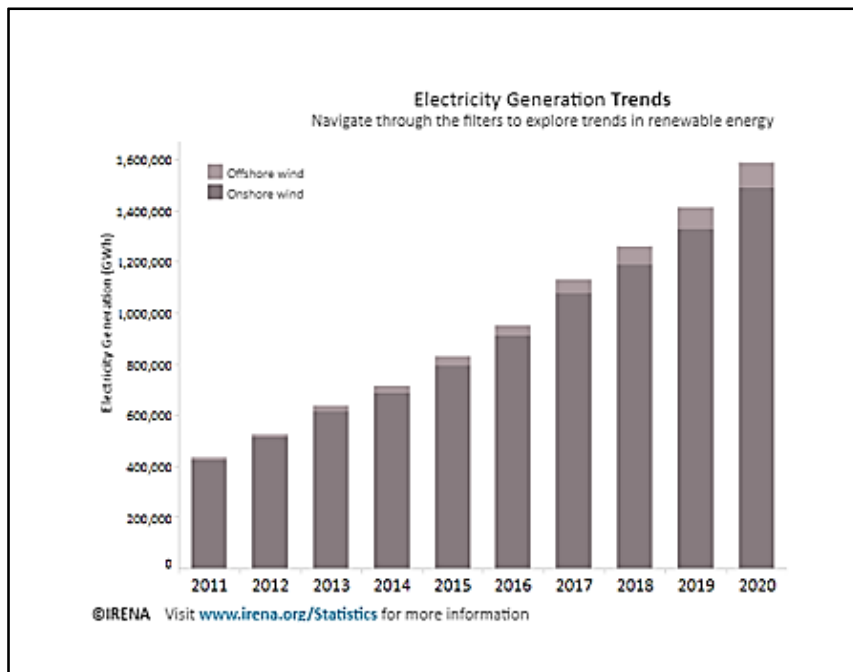
Source: IRENA Renewable Energy

Figure 1 – Solar Energy Data

2. Wind Energy: It's a booming market for wind energy. Its significance is growing since wind energy creates less greenhouse gases or air pollution when compared to other sources. Wind turbines either for mechanical or electrical power generation, has been proven technology [17]. By transforming the kinetic energy of moving air into electricity, wind energy may be used to generate power. The rotor blades of contemporary wind turbines are rotated by the wind, which transforms kinetic energy into rotational energy. A shaft that connects to the generator transfers this rotational energy, resulting in the creation of electrical energy.

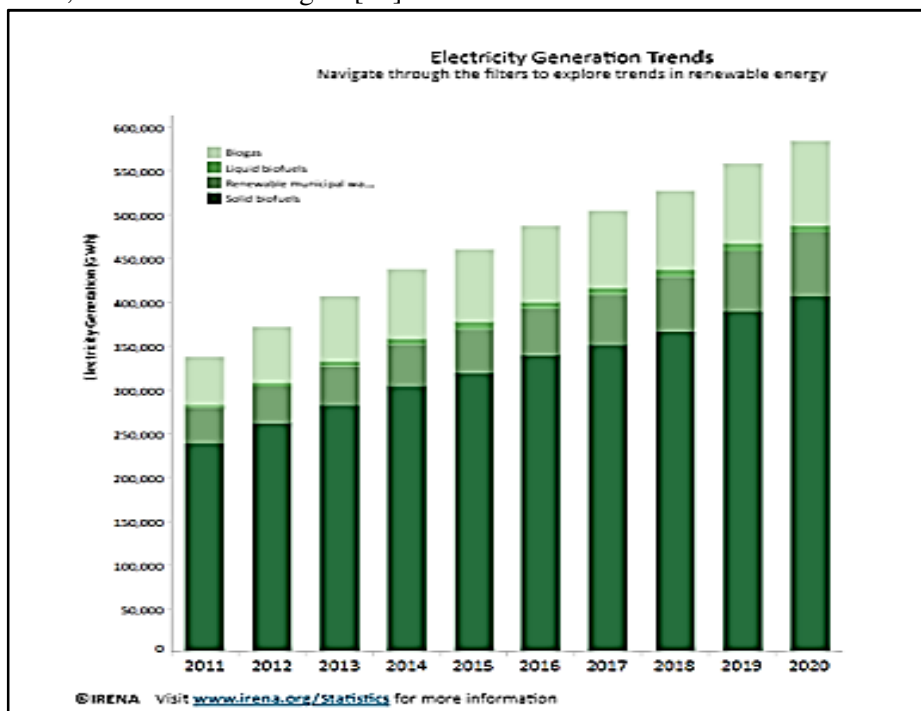
However, the unpredictable nature of the wind poses issues. Fluctuating winds do not provide wind turbines the optimal aerodynamic performance, and unexpected, uneven gusts can reduce the productivity of the blades. Since 2000, better R&D, favorable regulations, and declining prices have fueled a rapid expansion of wind power. According to data from IRENA, global installed wind generation capacity both onshore and

offshore has grown by a factor of 98 over the past 20 years, rising from 7.5 GW in 1997 to approximately 733 GW by 2018 [16]. Indeed, there is still a lot of scope for growth and advancement in both onshore and offshore wind, globally.



Source: IRENA Renewable Energy
 Figure 2 – Wind Energy Data

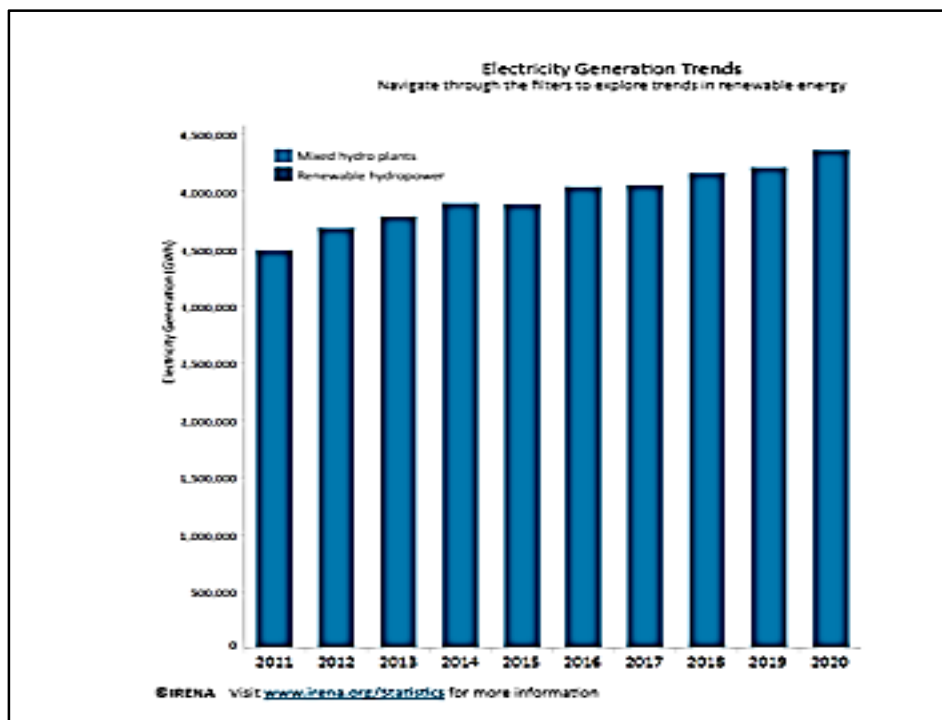
3. Bioenergy & biofuels: There are two primary subcategories of bioenergy use: traditional and modern. The term "traditional usage" specifies the combustion of biomass in the form of wood, animal dung, and conventional charcoal. On the other hand, term “modern uses” specifies liquid biofuels which produced from bagasse and other plants; bio-refineries; biogas produced through anaerobic digestion of residues; wood pellet heating systems; and other technologies [16].



Source: IRENA Renewable Energy
 Figure 3– Bio-Energy and Bio-Fuel Data

Biofuels like bioethanol and biodiesel have the potential to take up a significant portion of the energy portfolio in the future. However, when considering biofuel as a green agriculture technique, caution is essential. Concerns about food security, environmental dangers, and threats to biological diversity are important factors that must be considered when examining the sustainability of the relationship between agriculture and biofuel. In densely populated countries with expanding demand, like Brazil, India, and China, biomass has a tremendous potential to increase energy supplies. It can be directly burnt to provide heat or electricity, or it can be transformed into alternatives to oil or gas. The transportation industry makes the highest use of liquid biofuels, a practical renewable alternative to gasoline [16].

4. Ocean Energy: Large-scale Ocean energy facilities that are capable of dominating the world market are currently only an appealing potential. Existing marine energy devices have certain limits, much like any other new technology. However, marine energy is currently in the research and development phase and is not yet commercially viable. The cost of their creation and upkeep may now be onerous, and not all sites are ideal for their efficient application. These issues, however, will probably soon find solutions, and ocean energy conversion may soon produce as much electricity, if not more, than other green energy sources like conventional wind power systems.



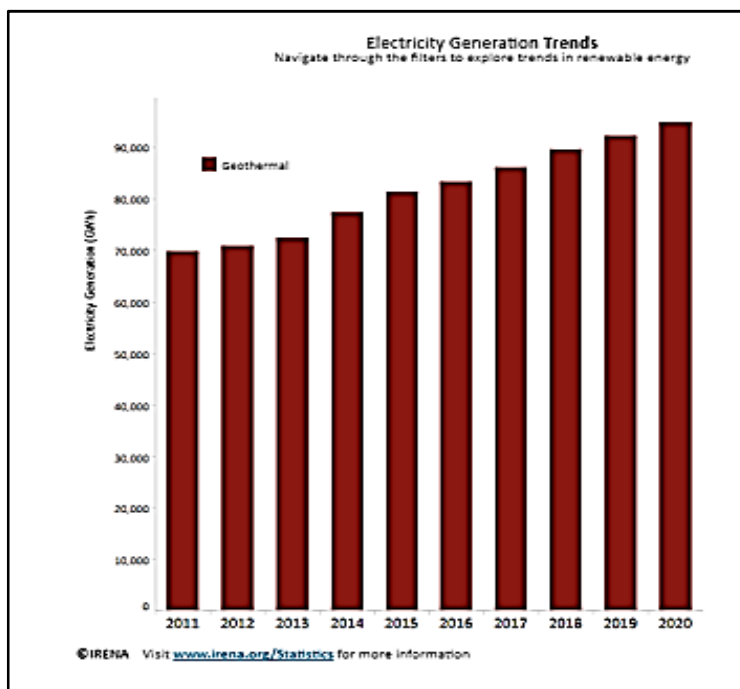
Source: IRENA Renewable Energy

Figure 4 – Ocean Energy Data

5. Geothermal Energy: Geothermal technology draws heat from the earth's subsurface, which may then be utilized for direct heating and cooling or transformed into power. However, medium- or high-temperature resources are required to produce power. These are often found around tectonically active areas where hot water and/or steam may be accessed at shallow depths or taken from Earth's surface.

The main advantages of geothermal energy are its low cost and its capability to operate year-round at high-capacity factors. This allows it to provide steady, dispatchable electricity and, if incentivized, auxiliary services to the electricity system. As the penetration of solar and wind power grows, these characteristics become more valuable [16]. Between 2010 and 2020, the levelized cost of electricity (LCOE) from geothermal power plants ranged in price per kWh between USD 0.049 and USD 0.085. In nations like Iceland, El Salvador, New Zealand, Kenya, and the Philippines, geothermal energy supplies a sizeable portion of the country's electrical needs. It also provides more than 90% of Iceland's heating needs.

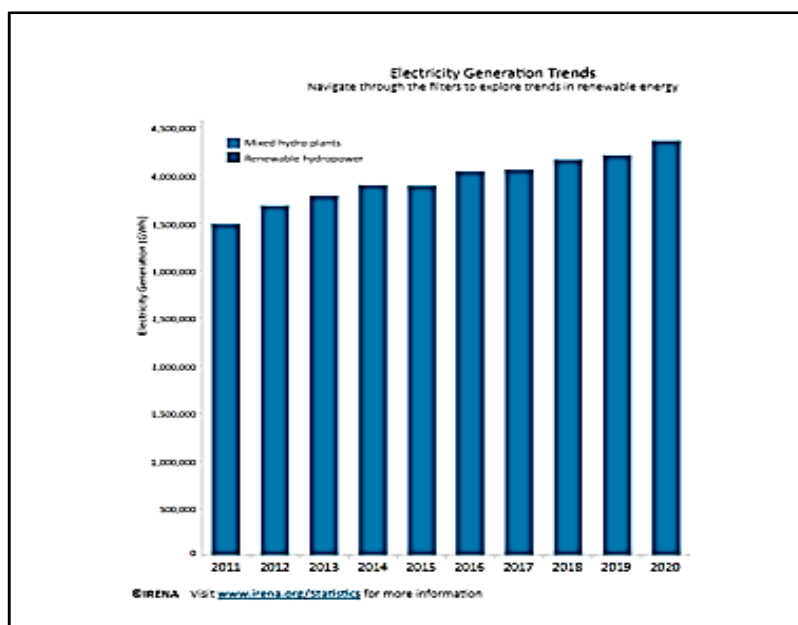
IRENA coordinates and supports the activities of the Global Geothermal Alliance (GGA), a framework for improved communication and knowledge exchange for coordinated action to boost geothermal power and heat generation globally. This promotes the development of geothermal energy more broadly [16].



Source: IRENA Renewable Energy
Figure – Geo-thermal Energy Data

6. Hydro-electric Power: Today, hydropower is one of the most economical ways to produce electricity and is frequently chosen when it is an option. For instance, hydropower generates 99% of the electricity in Norway. The 22.5-gigawatt, Three Gorges Dam in China is the biggest hydroelectric facility in the world. To supply power to around 80 million households, it generates 80 to 100 terawatt-hours annually. Apart from the big hydropower plants, micro & small Hydropower plants are important game changers and they can make a big difference to communities in remote locations.

Micro and small hydropower facilities are typically used to electrify rural areas, and they are also useful for facilitating irrigation and value addition at the source of agricultural products.



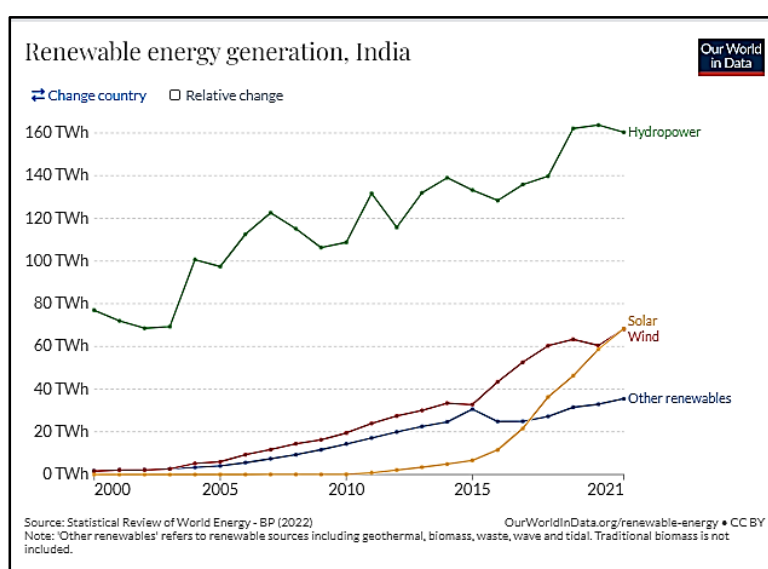
Source: IRENA Renewable Energy
Figure 6 – Hydro-electric Energy Data

7. Energy Conservation: By using green-technologically innovative products and processes, energy conservation can be achieved by the use of equipment which requires lesser amount of energy, following low consumption of electricity; thereby reducing the use of fossil fuels to generate the same. Energy conservation and efficiency are both energy reduction techniques.

8. Water Treatment: The basic goal of water treatment is to clean up the water's contaminants so that it is fit for further usage. Water treatment is used to lessen the negative effects of water that is utilized and then released back into the environment. Some of the fundamental physical and chemical processes used for water treatment include settling, filtration, disinfection, and coagulation. Other well-known processes include aerated lagoons, activated sludge, and slow sand filters.

9. Environmental Restoration: In the interest of protecting the environment and public health, environmental restoration usually involves contaminants from natural resources including soil, groundwater, and surface water reservoirs.

Green Technology: India at a glance: In India's market for green technologies, green energy is significant. India has set goals to reach 50% cumulative installed electric power by 2030, net-zero carbons emissions by 2070, and a reduction in carbon intensity of the economy of less than 45% by the end of the decade. By 2030, India might experience a market growth of up to \$80 billion due to low-carbon technology.



Source: Our world in data

Figure 7 – Renewable energy growth summary data of India

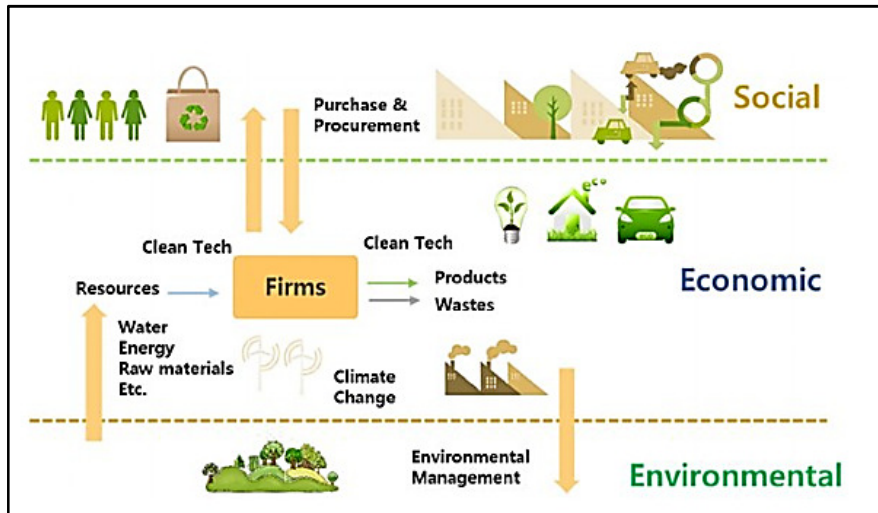
In order to meet its goal of 287.34 GW by FY 2027, India constructed 111.39 GW of green energy capacity in FY 2022. In FY 2022, India's EV market sold 429,710 units, and between FY 2023e and FY 2027e, it is anticipated to increase at a phenomenal compound annual growth rate (CAGR) of 66.73%. It is expected that the Indian market for water and wastewater treatment will produce INR 251.93 Bn in revenue by 2027, expanding at a CAGR of 8.41% from 2022 to 2027 [19].

The green energy market in India is dominated by solar energy, followed by wind, biomass, and small hydroelectricity. With the help of several initiatives to encourage solar parks, solar cities, and solar pumps as well as the National Solar Mission, India's solar capacity has significantly increased. In FY 2021, India installed solar and wind energy capacity of 40.09 GW and 39.25 GW, respectively. In India, Tamil Nadu, Rajasthan, and Maharashtra are home to the majority of wind energy plants. The country aims to have 275 GW of capacity for green energy by FY 2027 [19].

Apart from energy there are many other sectors such as electric cars, water and wastewater treatment, and electronic vehicles, product waste processing etc. are realising the importance of green technology initiatives and modifying themselves for rapid adaptation of green technology.

Sustainability is being advanced through green innovation, which is also boosting the Indian economy and motivating customers to use green technology products. The Indian economy will be propelled toward a sustainable future by the overwhelming growth of revolution that green technologies are being ignited. In India, the usage of green technology has grown over the past few years, affecting industries including the production of biofuels, electric car manufacturing, and the generation of wind and solar energy. The Central

government's incentive programs and initiatives are contributing to a significant amount of green innovation in India. These initiatives galvanizing public and private R&D practices which leading a remarkable growth in the share of green technology patents. Moreover, the advancement of green technology has also strengthened India's position on the Global Innovation Index. India jumped from 81st place in 2015–16 to 46th place in 2021.



Source: [20]
 Figure 8 – Green-innovation sectors

TRENDS IN PATENTS GRANTED			
Year	Total Patents	Green Tech Patents	Percentage of Green Tech *
2016-17	9,847	5,816	59.1%
2017-18	13,045	6,959	53.4%
2018-19	15,283	8,995	58.8%
2019-20	24,936	12,362	49.6%
2020-21	28,391	13,758	48.5%
2021-22#	–NA–	13,296	–NA–
Total	91,502	61,186	66.8%**

Source: Commerce & Industry Ministry | *Rounded Off | #Up to Jan 2022 | **Excluding '21-22 total patent numbers

Source: Indian Ministry of Commerce and Industry
 Figure 9 – Green-innovation Technology Patent Growth in India

Leveraging Green Technology to Achieve Environmental Sustainability: There is a possibility of achieving environmental sustainability, which aids in resource conservation and environmental preservation, by utilizing numerous green technologies in a scientific and strategic manner. A wide range of techniques and elements, from non-toxic agents for energy generation, come under the umbrella of «green technology». Therefore, the development of alternative technologies (green technologies) should be appropriate provide benefit to the world and conserve natural environment. In other words, that technology should continue to satisfy societal demands perpetually without harming or diminishing natural resources. In terms of innovative technologies that can develop truly recyclable or reusable goods. The majority of governments in both emerging and emerged nations are pumping huge amounts of funds into the renewable energy sector and seeking companies and industries to develop energy-efficient technologies to produce free-flow renewable energy. In regards to green technology initiatives in India, the government is running numerous programs to

combat climate change, including the National Hydrogen Mission, the Central and State Governments' EV Mandates, and the Renewable Power Obligation (RPO), which requires states to meet 25% of their energy needs through renewable sources. In addition to these programs, the government is also undertaking a variety of additional financial and educational initiatives to entice large and small private players to adopt cutting-edge techniques and provide opportunities to play on a worldwide scale in the field of green technology. Energy is used extensively around the world to run the society in different forms. Dependence on fossil fuels like coal, gas, and oil has risen. The challenge at hand is to assess and utilize diverse sources of energy that exist naturally in the environment. In the light of current scenario, green technology unquestionably achieves notable outcomes when using diverse alternative energy sources to meet the current energy demands and also supports sustainable growth.

Conclusion

The abovementioned argument brings us to the conclusion that adopting green technology is critical in today's environment if we want to attain environmental sustainability and lead sustainable lives. Due to the fact that conventional technology threatens the viability of the current environment. Even if there are obstacles to its execution, if we consider the long-term benefits, we and our descendants will undoubtedly profit. We can somewhat save our limited energy resources by employing green technologies.

To construct sustainable development routes for the green and clean future of India, it is essential to unlock the innovative potential. In light of the significant inter- and intra- regional inequalities and environmental disparities present in the socio-economic development journey push us to shift our focus on green technology innovation activities which strives to promote economic, social, and environmental sustainability. The two essential inputs that will shape the nation's future growth trajectory are water and energy security. In the past ten years, both sectors have experienced advances brought on by the community and the government.

Most of green technology innovations such as SPVT or portable water purification technology affect society and the economy, up to the grassroots level. Learning from the experiences in both sectors, India has tremendous potential to unleash green innovations in other areas of vital importance from the perspective of livelihoods, resource conservation and sustainability[21].

Recommendations

1. **Generate new financial instruments and new source of revenue:** green technologies not yet price competitive with fossil-fuel technologies. Governments must help in cutting-edge clean technologies and create the framework conditions that enable renewable-energy companies to bring their products to the market [1]. Hence, government should try to encourage public and private investments in green technology. Apart from that government should generate new sources of private and public revenues for the growth of green technology. It can be done providing bigger share to green finance in public financial institution, providing better access to green technology programs for financial or scientific aid from international organizations, introducing and encouraging government-backed "green bonds" in order to promote socially conscious investing.

2. **Inclusion and active participation at global level:** Inclusion and active participation at national and global level encourages high quality discussions, realization, and suggestions regarding country's current environmental and sustainable development policies. Moreover, in order to choose best policy and avoid hidden pitfalls, every country can learn lesson from other countries' experience.

3. **Promote new global collaboration on green technology to build a more effective framework for global clean technology collaboration,** the following actions should be implemented in light of the numerous international communiqués:

- Establish a Clean Technology Investment Forum at the regional, national, and global levels.
- Organise an expert group on best practices for green technology, then act on their advice to standardize contract terms, norms, and standards for green technologies.
- Improve the knowledge sharing ability of multi-industry multi-technology green technology research institutions through participating in international programs and seminars.
- Establish acceptable standards for public «green» assistance and cut back subsidy and grants to those projects which exhorting adverse effect on environment.

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