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Original Research Article

CLEAN AND GREEN ENERGY FOR VIKSITBHARAT@2047

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Abstract:

In envisioning the trajectory of Viksit Bharat @2047 towards sustainable development, the imperative of clean and green energy stands as a cornerstone. Harnessing the power of secondary databases, this abstract unveils a paradigm-shifting framework for the integration of renewable energy sources, environmental conservation, and socioeconomic advancement. This abstract outlines the strategy that Viksit Bharat should follow as it transitions from its current state of energy consumption to becoming a clean energy mainstay, by synthesising data from diverse sources, including energy consumption patterns, environmental impact assessments, and socioeconomic indicators. Through innovative policy formulations, technological advancements, and community engagement models, this framework not only addresses the pressing challenges of climate change and energy security but also fosters inclusive growth and environmental stewardship. By synergizingthepotentialofsolar, wind, hydro, and other renewable energy sources, Viksit Bharat @2047 emerges as a global exemplar of sustainable development, poised to leave an indelible mark on the annals of history. Viksit Bharat @2047 is a project that has the potential to revolutionise the energy sector and create economic opportunities for millions of people. It is a symbol of hope and inspiration for the world, and a testament to the power of collective action. Viksit Bharat @2047 is an example of what is possible when countries come together in common cause. It is a beacon of light in the darkness, a shining example of the power ofhumaningenuityand collaboration. It is a shining example of what is possible when we work together.

Keywords: *Viksit Bharat @2047, Amrit Kaal, Economic prospects, Sustainable development, Economic forecasting, Technological evolution, SDGs.*

Introduction:

Embracing clean and green energy is key to India achieving "Viksit Bharat" by 2047. Sustainability Goals (SDGs) are outlined by the United Nations as a means to reach sustainable development. Using clean energy in India can advances everal interrelated goals, such as poverty alleviation, health improvement, gender equality, and a quality education. As India transitions to cleaner energy sources, a my riad of positive impacts can unfold, fostering a sustainable and inclusive future both domestically and globally.

As clean energy becomes more accessible and affordable, rural communities become empowered, urban-rural divides are bridged, and new job opportunities are created. A responsible and sustainable future generation can be nurtured by education and awareness campaigns that accompany this shift. Moreover, prioritising clean energy contributes to sustainable cities and communities, promoting cleaner urban environments and responsible consumption and production practices.

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A clean and green energy future not only fosters innovation and strengthens ecosystems but also holds the potential to create positive economic and social outcomes for all Indian citizens. India's commitment to transitioning to a low-carbon economy not onlyenhancesits domestic prospects but also contributes significantly to global efforts in reducing green house gas emissions and protecting the environment.

Objective:

➢ Evaluate the importance of clean and green energy for ViksitBharat@2047.

➢ Assess the potential benefits of clean and green energy for achieving ViksitBharat

➢ Examine government initiatives for clean energy.

➢ Identify challenges to clean energy adoption in India.

Review of Literature:

1. The research paper, "Viksit Bharat @ 2047," outlines India's 2047 development strategy. It covers economic growth, environmental stewardship, social equity, tech innovation, governance reform, cultural integration, and urban-rural balance. Diversifying industries, leveraging demographics, and fostering innovation are key. Environmental sustainability is prioritised through renewable energy, conservation, and sustainable agriculture. Social equity is promoted via education, health care access, gender equality, and empowering marginalised groups. Technology drives transformative change, focusing on digital infrastructure and smart solutions. Governance reforms aim for transparency and efficiency. Cultural preservation is vital for socio-economic development. Global partnerships emphasise trade, technology exchange, and tackling climate change. Qualitative methods capture India'saspirations comprehensively.
   (Suthar, S. R. (2024). Setting Up the Foundation for a Sustainable and Electrified Nation withViksitBharat@ 2047. *Vidhyayana-An International Multidisciplinary Peer-Reviewed E-Journal-ISSN 2454-8596*, *9*(si2).)
2. The paper "Futuristic Analysis of India's Economic Prospects in Viksit Bharat @2047" explores India's ambitious initiative to become a developed powerhouse by its 100th year of independence. It meticulously analyzes economic forecasting, technological evolution, sustainable development, inclusive policies, job market dynamics, infrastructure resilience, global integration, financial inclusion, climate resilience, and the innovation ecosystem. Employing rigorous methodology including literature reviewandqualitativeanalysis, itoffersnuancedinsights. Thisresearchaids policymakers, businesses, and scholars, providing strategic direction to advance India's economic progress within the framework of Viksit Bharat @2047, guided by the Amrit Kaal period pillars.
   (Mahida, R. G. (2024). A Leading the Way: Sustainable Development and Economic Dynamics in Viksit Bharat@ 2047. *Vidhyayana-An International Multidisciplinary Peer-Reviewed E-Journal-ISSN 2454-8596*, *9*(si2).)
3. The research paper examines India's speculative future in 2047, a century post-independence, focusing on sustainability, tech growth, economy, andinclusivity. It explores facets like economy, tech, environment, education, healthcare, and governance crucial for India's development. By analysing trends and projecting scenarios, it paints a holistic view of India's evolution, stressing sustainable development, tech advancement,

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envisioning a prosperous, inclusive India by 2047. Emphasising environmental stewardship, it envisions a resilient, equitable society. Through this exploration, it offers insights into India's journey towards a thriving society in the coming decades.

(Dodiya, P. P. (2024). India 2047: Navigating the Path to a Sustainable and Inclusive Future. *Vidhyayana-An International Multidisciplinary Peer-Reviewed E-Journal-ISSN 2454-8596*, *9*(si2).)

4. The research paper delves into the rising significance of eco-friendly event management in sustainable development. It examines current trends, challenges, and innovations, aiming to showcase green event management's potential to reduce environmental impacts, foster social responsibility, and bolster economic resilience. Drawing from extensive literature, case studies, and empirical evidence, it identifies strategies for effective implementation. It also explores the roles of stakeholders, policies, and technology in shaping sustainable event planning. By synthesising insights, it provides guidance for practitioners, policymakers, and stakeholders to adopt environmentally conscious approaches, advancing the agenda of sustainable development.

(Rashminbhai, S. J. (2024). Assessment of the Sustainable Practices–A Specific Study on Green Event Management. *Vidhyayana-An International Multidisciplinary Peer-Reviewed E-Journal-ISSN 2454-8596*, *9*(si2).)

Need for Cleanand Green Energy:

Environmental Concerns: The burning of fossilfuelsforenergycontributessignificantlyto air and water pollution, leading to various health hazards and environmental degradation. Clean and green energy sources offer a sustainable alternative that minimises these harmful effects.

Climate Change Mitigation: Greenhouse gas emissions from traditional energy sourcesarea major contributor to global warming and climate change. Shifting towards clean energy sources helps reduce carbon emissions, thus mitigating the impacts of climate change.

Energy Security: Dependence on fossil fuels, which are finite and subject to geopolitical tensions, poses risks to energy security. Diversifying the energy mix with renewablesources enhances energy security by reducing reliance on imported fuels and volatile international markets.

Economic Growth: Investing in clean energy technologies stimulates economic growth by creating jobs, fostering innovation, and attracting investments. It also reduces the burden of healthcare costs associated with pollution-related illnesses.

Benefits of Clean Green Energy:

Reduced Pollution: Clean energy sources produce little to no air or water pollution, improving public health and quality of life.

Climate Resilience: Transitioning to green energy helps mitigate the impacts of climate change, such as extreme weather events, sea-level rise, and ecosystem disruptions.

Energy Independence: Utilising renewable energy sources decreases reliance on imported fossil fuels, enhancing energy independence and national security.

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Job Creation: The renewable energy sector generates employment opportunities across various skill levels, contributing to economic growth and social development.

Nitiatives by the Government:

Policy Support: Various policies, such as the National Solar Mission and Green Energy Corridor Scheme, aim to facilitate the integration and deployment of renewable energy resources.

- Promotion of alternative fertilisers and balanced chemical fertilizer use under"Amelioration of Mother Earth".
- Establishment of 500 'waste to wealth' plants through the GOBARdhan scheme, investing Rs 10,000 crore.
- Facilitation of one crore farmers to adopt natural farming within the next 3 years.
- Setting up 10,000 Bhartiya Prakritik Kheti Bio-Input Resource Centres for natural farming.
- Implementation of the MISHTI initiative for mangrove plantation along coastlines andsalt pan lands.
- Introduction of the Amrit Dharohar scheme to optimise wetland use and enhance biodiversity and eco-tourism.
- Promotionofcoastalshippingforefficientandcost-effectivetransport.
- Allocation of funds for scrapping old CentralGovernmentvehiclesandsupportingstatesin replacing old vehicles and ambulances.
- Allowing100%FDI underautomatic routefor renewableenergy projects.

Financial Incentives: The government provides subsidies, tax incentives, and viability gap funding to promote the adoption of clean energy technologies.

Regulatory Framework: The government has established standards, guidelines, and regulations to govern the development, operation, and grid integration of clean energy projects.

International Cooperation: India collaborates with international organisations and partners to access technology, finance, and expertise for advancing its clean energy transition.

Clean Green Energy and Viksit Bharat Goal:

Sustainable Development: Clean and green energy aligns with the goal of Vikasit Bharat (Developed India) by promoting sustainable development, environmental stewardship, and inclusive growth.

Enhanced Resilience: Investing in clean energy infrastructure enhances resilience to climate change, strengthens energy security, and fosters socio-economic progress across diverse communities.

Technological Innovation: Embracing clean energy technologies fosters innovation, entrepreneurship, ands kill development, driving India's transition towards a knowledge-based economy.

India and the World for Clean Green Energy:

Global Leadership: India's commitment to clean energy and climate action positions it asa global leader in sustainable development, contributing to international efforts to combat climate change.

International Collaboration: India collaborates with other nations, organisations, and stakeholders to share best practices, technologies, and resources for advancing the global clean energy agenda.

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Diplomatic Relations: Clean energy cooperation strengthens diplomatic ties, fosters partnerships, and promotes mutual understanding and goodwill among nations.

Challenges and the Road Ahead:

Intermittency and Grid Integration: Integrating intermittent renewable energy sources into the grid poses technical challenges related to grid stability, reliability, and balancing supply and demand.

Financial Viability: While the costs of clean energy technologies have decreased, financial barriers, such as access to finance and investment risks, still hinder their widespreadadoption.

Infrastructure Development: Developing the necessary infrastructure for clean energy deployment, including transmission lines, storage facilities, and charging infrastructure, requires significant investment and planning.

Policy and Regulatory Uncertainty: Uncertainty surrounding policies, regulations, and market structures can impede investments and hinder the scaling up of clean energy projects.

Public Awareness and Participation: Raising awareness about the benefits of cleanenergy and engaging communities in the transition process are essential for overcoming resistance and fostering public support.

Despite these challenges, the Indian government's commitment, coupled with concerted efforts from various stakeholders, is driving the clean energy transition forward, paving the way for a sustainable and prosperous future.

Conclusion:

To maintain sustainable development, India must transition to clean and greenenergy. Clean energy innovation and resilience have been promoted by the government, and public awareness and international cooperation are helping India become more environmentally friendly. India's investments inrenewableenergyarepayingoff, withthecountrybecominga globalleader in solar power and wind power. Hydrogen fuel cells are also being invested in to further increase the country's clean energy capabilities. Electricvehicles, forinstance, are also being used to help reduce the country's carbon footprint. Greenhousingandsmartgrids are also being invested in. The country is also promoting clean energy through international collaborations and partnerships.

References:

https://www.iea.org/commentaries/india-s-clean-energy-transition-is-rapidly-underway-benefiting-the-entire-world

https://www.pib.gov.in/Pressreleaseshare.aspx?PRID=1907698https://vikaspedia.in/energy/best-practices/green-energy-transition-in-indiahttps://www.citigroup.com/global/insights/global-insights/india-clean-energy-progress

-policy

Suthar, S. R. (2024). Setting Up the Foundation for a Sustainable and Electrified Nation with Viksit Bharat@2047.Vidhyayana-AnInternationalMultidisciplinaryPeer-ReviewedE-Journal-ISSN2454-8596, 9(si2).

Mahida, R. G. (2024). A Leading the Way: Sustainable Development and Economic Dynamics in Viksit Bharat@ 2047. Vidhyayana-An International Multidisciplinary Peer-Reviewed E-Journal-ISSN 2454-8596, 9(si2).

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