



## Bridging Fossil Fuel Dependence and Renewable Transition: India's Energy Diplomacy and Security Strategy in South Asia

*Loknath Haldar*

*Ph.D. Scholar, Department of political science, Kazi Nazrul University, Asansol*

DOI: <https://doi.org/10.70798/tgjct/010400045>

### **Abstract**

*Energy security has emerged as a critical concern in the contemporary global order, particularly for developing regions such as South Asia where rising energy demand, population growth, and economic expansion have intensified dependence on external energy sources. This paper examines the evolving dynamics of energy diplomacy in South Asia with a specific focus on India's role in balancing fossil fuel dependence and renewable energy transition. India, as the largest energy consumer in the region, faces the dual challenge of ensuring uninterrupted energy supply while simultaneously addressing environmental sustainability and climate commitments. The study adopts a qualitative research methodology based on secondary data sources, including policy documents, academic literature, and international reports. It analyses India's oil diplomacy, regional energy cooperation, and green energy initiatives within a broader geopolitical and economic framework. The paper highlights how India has strategically diversified its energy sources, developed cross-border energy infrastructure, and promoted renewable energy partnerships through initiatives such as the International Solar Alliance. The paper concludes that India's energy diplomacy has the potential to reshape regional energy dynamics and contribute to sustainable development in South Asia. However, the success of this transition will depend on enhanced regional cooperation, policy innovation, and sustained investment in renewable energy infrastructure.*

**Keywords:** *Energy Security, Energy Diplomacy, South Asia, India Renewable Energy, Oil Politics, Energy Transition*

### **Introduction**

Energy has become one of the most critical determinants of economic growth, national security, and geopolitical influence in the contemporary global order. In the twenty-first century, access to reliable, affordable, and sustainable energy resources is not merely an economic necessity but a strategic imperative for states. According to the International Energy Agency (IEA, 2023), global energy demand is expected to increase by nearly 25–30 percent by 2040, with developing regions accounting for the majority of this growth. In this context, South Asia has emerged as one of the most dynamic yet vulnerable energy regions in the world. South Asia, comprising countries such as India, Bangladesh, Pakistan, Nepal, Sri Lanka, Bhutan, and the Maldives, accounts for nearly 24 percent of the global population but consumes a disproportionately lower share of global energy. The region faces significant challenges in ensuring energy security due to structural constraints such as high import dependence, inadequate infrastructure, and uneven access to energy. According to the World Bank (2022), nearly 200 million people in South Asia still lack reliable access to electricity, highlighting the region's persistent energy deficit. India, as the largest economy and energy consumer in South Asia, plays a central role in shaping the region's energy dynamics. India is currently the third-largest energy consumer in the world, accounting for approximately 6–7

percent of global energy demand (IEA, 2023). The country's energy consumption is projected to double by 2040, driven by rapid industrialization, urbanization, and rising income levels. However, domestic energy production has not kept pace with this growing demand, resulting in a high level of dependence on imported energy resources. In particular, India's dependence on crude oil imports is a major concern. According to the Ministry of Petroleum and Natural Gas (2023), India imports more than 85 percent of its crude oil requirements. This makes the country highly vulnerable to external shocks such as fluctuations in global oil prices, geopolitical tensions in the Middle East, and disruptions in supply chains. The Russia–Ukraine conflict and instability in West Asia have further underscored the strategic risks associated with energy dependence.

To address these challenges, India has increasingly relied on energy diplomacy as a key instrument of foreign policy. Energy diplomacy involves the use of diplomatic engagement, international partnerships, and strategic negotiations to secure energy supplies and promote cooperation. Through long-term agreements with oil-producing countries, investments in overseas energy assets, and participation in global energy governance, India seeks to diversify its energy sources and enhance its strategic autonomy. At the same time, the global energy system is undergoing a significant transformation driven by climate change concerns and technological advancements. The Paris Agreement and global climate commitments have accelerated the shift toward renewable energy sources. According to the International Renewable Energy Agency (IRENA, 2022), renewable energy accounted for nearly 30 percent of global electricity generation, and this share is expected to increase rapidly in the coming decades.

India has positioned itself as a leader in this transition. The country has set an ambitious target of achieving 500 GW of non-fossil fuel energy capacity by 2030 and aims to meet 50 percent of its energy requirements from renewable sources. As of 2023, India has already installed over 170 GW of renewable energy capacity, including solar, wind, and hydropower. Initiatives such as the International Solar Alliance have further enhanced India's global leadership in renewable energy. However, the transition from fossil fuels to renewable energy presents significant challenges. Renewable energy projects require substantial investment, advanced technology, and robust infrastructure. According to the Asian Development Bank (ADB, 2021), South Asia needs to invest over \$1.5 trillion in energy infrastructure by 2030 to meet its growing demand and sustainability goals. For developing countries, mobilizing such resources remains a major challenge. In the regional context, energy cooperation has emerged as a critical strategy for addressing these challenges. India has actively promoted cross-border energy trade and infrastructure development in South Asia. For instance, India exports electricity to Bangladesh and Nepal and collaborates with Bhutan on hydropower projects. These initiatives not only enhance energy security but also strengthen regional integration and economic cooperation. At the same time, the growing presence of China in South Asia has introduced new geopolitical dynamics. Through the Belt and Road Initiative, China has invested heavily in energy infrastructure projects across the region. According to various estimates, China has committed billions of dollars to energy projects in Pakistan, Sri Lanka, and Bangladesh. This has created a competitive environment in which energy diplomacy is closely linked to broader strategic considerations.

The ongoing tensions involving countries such as Iran, Israel, and other regional actors have heightened the risk of supply disruptions and price fluctuations. Events such as attacks on oil infrastructure, disruptions in key maritime routes like the Strait of Hormuz, and broader regional conflicts have demonstrated the vulnerability of global energy supply chains. For instance, any escalation in conflict in the Gulf region has the potential to disrupt nearly one-fifth of the world's oil supply, thereby directly impacting energy-importing countries. For India, these developments underscore the strategic importance of diversifying energy sources and strengthening energy diplomacy. The volatility in global oil prices not only affects India's import bill but also has broader implications for inflation, fiscal stability, and economic growth. Consequently, India has been actively seeking to reduce its dependence on a single region by expanding energy partnerships with countries in Africa, the United States, and Russia. At the same time, these geopolitical uncertainties have reinforced the urgency of transitioning toward

renewable energy. By investing in domestic renewable energy capacity and promoting regional cooperation in clean energy, India aims to reduce its exposure to external shocks and enhance long-term energy security. Thus, the instability in the Middle East acts as both a challenge and a catalyst, pushing India toward a more diversified and sustainable energy strategy. This paper seeks to examine the evolving dynamics of energy diplomacy in South Asia, focusing on India's role in bridging fossil fuel dependence and renewable transition. It argues that India's integrated approach not only enhances its own energy security but also contributes to regional stability and sustainable development.

## **Literature Review**

The study of energy security, energy diplomacy, and renewable energy transition has emerged as a critical area of interdisciplinary research, reflecting the increasing importance of energy in shaping global economic development, geopolitical relations, and environmental sustainability. Over time, the concept of energy security has undergone significant transformation, evolving from a narrow focus on supply stability to a broader and more complex framework encompassing economic, environmental, and political dimensions.

The classical understanding of energy security is rooted in the work of Daniel Yergin (2011), who defines it as the uninterrupted availability of energy at affordable prices. Yergin's historical analysis demonstrates how oil has been central to global power politics, influencing wars, alliances, and economic strategies. His work highlights the importance of diversification of energy sources, strategic reserves, and international cooperation in ensuring long-term energy stability. However, this traditional perspective has been significantly expanded by contemporary scholars. Benjamin K. Savacool (2011) proposes a multidimensional approach to energy security that includes availability, affordability, efficiency, environmental sustainability, and governance. Savacool argues that energy security must be understood as a dynamic and context-specific concept, shaped by social, economic, and institutional factors. This broader framework is particularly relevant in the context of climate change and the global transition toward sustainable energy systems.

The intersection of energy and geopolitics has been a central theme in the literature on energy diplomacy. Carlos Pascual and Jonathan Elkind (2010) emphasize that energy diplomacy is a critical tool for managing geopolitical risks and securing energy supplies. They highlight how states use diplomatic engagement, strategic partnerships, and market mechanisms to navigate the complexities of global energy markets. Similarly, Andreas Gold Thau (2013) situates energy diplomacy within the broader framework of global energy governance. He argues that energy systems are shaped by a complex interplay of state actors, multinational corporations, and international institutions. Gold Thau's analysis underscores the importance of governance structures in managing energy transitions and addressing global challenges such as climate change. From a political economy perspective, scholars have highlighted the role of energy in shaping development trajectories. Amartya Sen (1999) provides a normative framework that links energy access with human development and capabilities. Sen's concept of "development as freedom" emphasizes that access to energy is essential for improving living standards, reducing poverty, and enhancing human well-being. This perspective is particularly relevant for South Asia, where energy poverty remains a significant issue.

In addition to Sen, development economists have emphasized the importance of energy in economic growth. Energy is not only a factor of production but also a driver of industrialization and modernization. The relationship between energy consumption and economic growth is particularly evident in emerging economies such as India, where rising energy demand is closely linked to economic expansion. In the context of South Asia, Debasish Nandy (2019) provides a critical and region-specific analysis of energy security. Nandy argues that energy security in South Asia is deeply intertwined with issues of economic development, political stability, and regional cooperation. He emphasizes that the region's energy challenges cannot be addressed in isolation but require coordinated policy responses and institutional collaboration. In his edited volume *Mapping South Asia: State,*

Society and Security Dilemmas, Nandy highlights the interconnected nature of security challenges in the region, including energy, environment, and political instability. He argues that India, as the dominant regional power, has a crucial role to play in facilitating cooperation and promoting sustainable development. Nandy's work is particularly significant in bridging the gap between traditional security studies and contemporary energy concerns. Navroz K. Dubash (2019) examines India's approach to energy transition, highlighting the country's pragmatic and incremental strategy. Dubash argues that India's energy policy is characterized by a balancing act between economic growth and environmental sustainability, with renewable energy playing an increasingly important role. Subhas Bhattacharyya (2020) focuses on the potential for renewable energy development in South Asia. He identifies several challenges, including financial constraints, technological limitations, and policy fragmentation, which hinder the large-scale adoption of renewable energy. At the same time, Bhattacharyya highlights the significant opportunities for regional cooperation, particularly in areas such as hydropower and solar energy. The geopolitical dimensions of energy have also been extensively studied. Eshita Gupta (2017) examines the role of oil in shaping international relations, emphasizing its strategic importance in global politics. Gupta's work highlights how energy resources can be used as instruments of power and influence, shaping alliances and conflicts.

In addition, Robert O. Keohane (1984) provides a theoretical framework for understanding international cooperation. His concept of complex interdependence suggests that states are increasingly interconnected through economic and institutional linkages, creating opportunities for cooperation even in the absence of centralized authority. This framework is particularly relevant for analysing regional energy cooperation in South Asia. Recent empirical studies and reports by international organizations such as the International Energy Agency, World Bank, and Asian Development Bank provide valuable data on energy trends in South Asia. These reports highlight the region's growing energy demand, increasing reliance on imported fossil fuels, and the need for substantial investment in energy infrastructure. They also emphasize the importance of renewable energy and regional cooperation in achieving sustainable development. Another important dimension of the literature relates to energy transition theory. Scholars have argued that energy transition is not merely a technological process but a socio-technical transformation involving changes in institutions, policies, and social practices. In particular, the paper builds on the regional insights provided by Nandy and integrates them with broader theoretical and empirical perspectives. It argues that India's energy diplomacy represents a hybrid model that combines traditional strategies of securing fossil fuel supplies with innovative approaches to promoting renewable energy. This model has significant implications for regional cooperation, economic development, and environmental sustainability in South Asia.

## **Research Gap**

Despite the growing body of literature on energy security, energy diplomacy, and renewable energy transition, several critical gaps remain, particularly in the context of South Asia. Existing studies have largely examined these themes in isolation, leading to a fragmented understanding of the region's energy dynamics. A significant portion of the literature focuses on fossil fuel geopolitics, especially oil diplomacy, emphasizing issues such as supply security, price volatility, and geopolitical competition. Scholars like Daniel Yergin (2011) and Eshita Gupta (2017) have extensively analysed the strategic importance of oil in global politics. However, these studies often overlook the emerging significance of renewable energy in reshaping energy security paradigms. Another stream of research concentrates on renewable energy transition and sustainability, highlighting technological innovation, environmental concerns, and policy frameworks. Scholars such as Benjamin K. Sovacool (2011) and Navroz K. Dubash (2019) have contributed significantly to this field. Nevertheless, these studies tend to treat renewable energy as a separate domain, without adequately linking it to ongoing fossil fuel dependence and geopolitical realities.

There is a noticeable lack of integrated regional analysis focusing on South Asia. While Debasish Nandy (2019) provides valuable insights into energy security and regional cooperation, there remains limited research that systematically examines how energy diplomacy operates within the specific political, economic, and institutional context of South Asia. In particular, the interplay between regional cooperation, geopolitical competition, and energy transition has not been sufficiently explored. Existing literature has not adequately addressed the dual strategy of India, which simultaneously pursues fossil fuel-based energy security and renewable energy transition. India's approach represents a hybrid model that integrates traditional oil diplomacy with emerging green energy initiatives. However, there is a lack of comprehensive studies that analyse this dual strategy within a unified framework. In light of these gaps, this study aims to provide a comprehensive and integrated analysis of energy security in South Asia, focusing on India's role in bridging fossil fuel dependence and renewable energy transition. By combining geopolitical, economic, and sustainability perspectives, the paper seeks to contribute to a more holistic understanding of energy diplomacy in the region.

## **Objectives of the Study**

1. To examine the role of oil diplomacy in shaping energy relations and geopolitical dynamics in South Asia.
2. To analyse India's energy security strategy in the context of increasing dependence on imported fossil fuels.
3. To evaluate the process and challenges of renewable energy transition in South Asia.
4. To assess India's role in promoting regional energy cooperation and green energy initiatives.
5. To explore how India balances fossil fuel dependence with renewable energy transition through its energy diplomacy.

## **Research Questions**

1. How does oil diplomacy influence energy relations and geopolitical dynamics in South Asia?
2. What are the major challenges to energy security in South Asian countries, particularly India?
3. How is India managing the transition from fossil fuel dependence to renewable energy?
4. What role does India play in promoting regional energy cooperation and green energy initiatives in South Asia?
5. To what extent can India's energy diplomacy ensure a balance between energy security and sustainable development in the region?

## **Research Methodology**

This study adopts a qualitative and analytical research design to examine the complex interplay between fossil fuel dependence, renewable energy transition, and energy diplomacy in South Asia, with a particular focus on India. Given the multidimensional nature of the research problem—encompassing geopolitical, economic, and environmental aspects—a qualitative approach is considered most appropriate for providing a comprehensive and in-depth understanding. The study is primarily based on a descriptive and analytical research approach. The descriptive component aims to outline the existing energy scenario in South Asia, including patterns of energy consumption, dependence on fossil fuels, and the status of renewable energy development. The analytical component critically examines India's energy diplomacy and its role in balancing traditional energy security concerns with the transition toward sustainable energy.

The research follows an interpretative framework, which allows for the analysis of policy decisions, institutional mechanisms, and geopolitical dynamics. This approach is particularly useful for understanding how different actors, states, institutions, and international organizations interact within the broader energy landscape. The study is entirely based on secondary data, collected from a wide range of reliable and authoritative sources. These include: Academic books and peer-reviewed journal articles on energy security, energy diplomacy, and renewable energy Reports and datasets from international organizations such as the International Energy Agency, World Bank, and Asian Development Bank, Government publications and policy documents, particularly from

the Ministry of Petroleum and Natural Gas, Research reports, working papers, and credible online databases. The use of secondary data enables the study to incorporate diverse perspectives and empirical evidence, thereby enhancing the reliability and validity of the analysis. The scope of the study is limited to the South Asian region, with a primary focus on India's energy diplomacy and its impact on regional energy dynamics. While the study considers global energy trends and geopolitical developments, its analysis is centered on regional interactions and policy frameworks. Oil diplomacy and fossil fuel dependence, Renewable energy transition, regional cooperation and geopolitical factors. However, the study does not include primary data collection or quantitative modelling, which may limit the scope for statistical generalization. Despite its comprehensive approach, the study has certain limitations: Dependence on secondary data may restrict access to real-time or unpublished information, Rapid changes in global energy markets and geopolitical conditions may affect the relevance of certain findings, The qualitative nature of the study may limit the ability to provide precise quantitative measurements

## **Discussion**

Oil diplomacy plays a central role in shaping energy relations and geopolitical alignments in South Asia. India, as one of the world's largest importers of crude oil, relies heavily on external sources, particularly from the Middle East. This dependence has transformed energy into a strategic instrument of foreign policy, where diplomatic engagement is essential for securing stable supply chains. India's oil diplomacy operates through long-term bilateral agreements, strategic partnerships, and investment in overseas energy assets. Countries such as Saudi Arabia, Iraq, and the United Arab Emirates serve as key suppliers, forming the backbone of India's energy imports. However, these relationships are not merely transactional; they are embedded within broader geopolitical considerations, including regional stability, maritime security, and global power dynamics. The geopolitical volatility of the Middle East significantly influences these dynamics. Ongoing tensions involving Iran, Israel, and other regional actors create uncertainties in global oil markets. Disruptions in critical maritime chokepoints such as the Strait of Hormuz, through which a substantial portion of global oil supply passes, pose direct risks to India's energy security. Consequently, oil diplomacy is closely linked to India's strategic engagement in maintaining stability in these regions. At the regional level, oil diplomacy also shapes relationships within South Asia. India has positioned itself as an energy provider by supplying refined petroleum products and developing infrastructure in neighbouring countries. This enhances regional interdependence while reinforcing India's strategic influence.

Energy security in South Asia is constrained by a range of structural, economic, and political challenges. The region's heavy dependence on imported fossil fuels exposes it to global market volatility and geopolitical risks. Price fluctuations in international oil markets have direct implications for national economies, particularly for developing countries with limited fiscal capacity. Infrastructure deficits further exacerbate these challenges. Weak transmission and distribution networks, inadequate storage facilities, and limited technological capabilities hinder the efficient utilization of energy resources. In many parts of South Asia, access to reliable electricity remains a persistent issue, reflecting deeper structural inequalities. Financial constraints also pose significant barriers. Renewable energy projects require substantial investment, and many countries in the region lack the necessary financial resources and institutional capacity. Dependence on foreign investment creates additional vulnerabilities, including exposure to external economic and political pressures. Political tensions and institutional weaknesses further complicate regional cooperation. India's approach to energy transition is characterized by a pragmatic and incremental strategy that balances economic growth with environmental sustainability. Rather than pursuing an abrupt shift away from fossil fuels, India has adopted a gradual transition that integrates renewable energy into its existing energy mix. The country has set ambitious targets for renewable energy expansion, including achieving 500 GW of non-fossil fuel capacity by 2030. Significant progress has been made in solar and wind energy, supported by policy initiatives such as the National Solar Mission. These efforts are complemented by investments in energy storage, grid modernization, and technological innovation. At the same time, India continues to rely on

fossil fuels to meet its immediate energy needs. Coal remains a dominant source of electricity generation, while oil is essential for transportation and industrial activities. This dual approach reflects the realities of a developing economy where energy demand is rapidly increasing. Energy diplomacy plays a crucial role in managing this transition. India has emerged as a key driver of regional energy cooperation in South Asia. Through initiatives such as cross-border electricity trade, hydropower collaboration, and renewable energy projects, India has strengthened its role as a regional energy hub. In Bangladesh, India exports electricity and has developed petroleum pipelines, enhancing energy access and connectivity. In Nepal and Bhutan, India has invested in hydropower projects, facilitating clean energy production and trade. In Sri Lanka, India has supported renewable energy initiatives, particularly in solar and wind energy. These efforts contribute to regional integration by creating interconnected energy networks and fostering economic cooperation.

India's energy diplomacy reflects a broader effort to balance energy security with sustainable development. By integrating fossil fuel strategies with renewable energy initiatives, India seeks to address both immediate and long-term challenges. Renewable energy plays a critical role in this strategy by reducing dependence on imported fossil fuels and mitigating environmental impacts. At the same time, continued engagement in oil diplomacy ensures the availability of energy required for economic growth. However, achieving this balance is not without challenges. Financial constraints, technological limitations, and infrastructural gaps hinder the rapid expansion of renewable energy. Geopolitical competition, particularly with China, adds another layer of complexity. Despite these challenges, India's approach represents a viable model for developing countries. By adopting a hybrid strategy that combines traditional and modern energy systems, India demonstrates how energy security and sustainability can be pursued simultaneously. The interplay between oil diplomacy, renewable energy transition, and regional cooperation highlights India's evolving role in the global energy landscape. India's strategy reflects a shift from a reactive approach to a proactive and strategic engagement with energy issues. The competition with China, particularly in the context of infrastructure investment and regional influence, underscores the importance of energy diplomacy as a tool of geopolitical strategy.

## **Policy Recommendations**

The analysis of India's energy diplomacy and regional energy dynamics in South Asia highlights the need for a comprehensive and forward-looking policy framework. India should take a leading role in strengthening regional energy cooperation in South Asia through platforms such as SAARC and BIMSTEC. A coordinated regional approach can enhance energy sharing, improve efficiency, and reduce duplication of efforts. Institutional mechanisms for regular dialogue, joint planning, and policy coordination should be developed to foster trust and long-term collaboration among South Asian countries. The establishment of a South Asian regional energy grid is essential for improving energy security and promoting sustainable development. Such a grid would enable cross-border electricity trade, optimize resource utilization, and facilitate the integration of renewable energy sources. India can lead this initiative by expanding its existing power connectivity with neighbouring countries like Bangladesh, Nepal, and Bhutan. To reduce vulnerability to geopolitical risks, particularly in the Middle East, India must continue diversifying its energy sources and supply chains. This includes expanding partnerships with countries in Africa, Latin America, and North America, increasing LNG imports, and investing in alternative energy sources such as hydrogen and bioenergy. Diversification will enhance resilience and strategic autonomy. India should intensify its efforts to expand renewable energy capacity by promoting solar, wind, and other clean energy technologies. This requires strong policy support, including financial incentives, subsidies, and regulatory reforms. Investment in energy storage systems and grid modernization is also crucial to ensure the reliability and stability of renewable energy.

## Conclusion

The evolving dynamics of energy security in South Asia reflect a complex interplay of economic growth, geopolitical considerations, and environmental imperatives. As one of the most energy-deficient yet rapidly developing regions in the world, South Asia faces significant challenges in ensuring reliable and sustainable energy access. Within this context, India, as the largest economy and energy consumer in the region, occupies a central role in shaping the trajectory of regional energy development. This study has examined the critical role of India's energy diplomacy in addressing the dual challenge of fossil fuel dependence and renewable energy transition. The analysis demonstrates that India's energy strategy is characterized by a pragmatic and hybrid approach, which integrates traditional oil diplomacy with forward-looking renewable energy initiatives. This dual strategy enables India to secure its immediate energy needs while simultaneously advancing its long-term sustainability goals. The findings highlight that oil diplomacy continues to be a cornerstone of India's energy security strategy. India's engagement with major oil-producing regions, particularly the Middle East, underscores the importance of stable supply chains and strategic partnerships. However, the increasing geopolitical volatility in these regions, including ongoing tensions and conflicts, has exposed the vulnerabilities associated with excessive dependence on fossil fuels. This has reinforced the need for diversification and strategic resilience. At the same time, India's commitment to renewable energy transition has emerged as a defining feature of its energy policy.

Through ambitious targets, policy reforms, and international initiatives such as the International Solar Alliance, India has positioned itself as a global leader in sustainable energy. The expansion of solar, wind, and hydropower capacity reflects a broader shift toward cleaner and more resilient energy systems. The study also underscores the significance of regional energy cooperation in South Asia. India's engagement with neighbouring countries through cross-border electricity trade, hydropower collaboration, and renewable energy projects demonstrates its proactive role in promoting regional integration. These challenges highlight the need for coordinated policy responses and strategic planning. Despite these constraints, India's energy diplomacy represents a viable model for balancing energy security with sustainable development. India's role in shaping the energy landscape of South Asia will be instrumental in determining the region's capacity to achieve sustainable development and long-term stability in an increasingly uncertain global environment.

## References

- Ang, B. W., Choong, W. L., & Ng, T. S. (2015). Energy security: Definitions, dimensions and indexes. *Renewable and Sustainable Energy Reviews*, 42, 1077–1093.
- Asian Development Bank. (2021). *Energy outlook for Asia and the Pacific*.
- Bhattacharyya, S. (2020). *Energy economics: Concepts, issues, markets and governance*. Springer.
- BloombergNEF. (2023). *Energy transition outlook*.
- BP. (2022). *Statistical review of world energy*.
- Cherp, A., & Jewell, J. (2014). The concept of energy security: Beyond the four As. *Energy Policy*, 75, 415–421.
- Dubash, N. K. (2019). *India's energy and climate policy*. Oxford University Press.
- Florini, A., & Sovacool, B. K. (2011). Who governs energy? *Energy Policy*, 39(9), 5239–5248.
- Goldthau, A. (2013). *The handbook of global energy policy*. Wiley-Blackwell.
- Government of India. (2023). *National energy policy*.
- Gupta, E. (2017). Oil vulnerability index of oil-importing countries. *Energy Policy*, 105, 251–264.
- International Energy Agency. (2023). *World energy outlook 2023*.
- International Renewable Energy Agency. (2022). *Renewable energy statistics 2022*.
- International Solar Alliance. (2023). *Annual report*.
- Kruyt, B., van Vuuren, D. P., de Vries, H. J., & Greenberg, H. (2009). Indicators for energy security. *Energy Policy*, 37(6), 2166–2181.

# *The Global Journal of Contextual Thought*

(A Double-Blind, Peer-Reviewed, Quarterly, Multidisciplinary Journal)

Volume: 1, Issue: 4 Feb'26 - Apr'26 Home Page: [www.tgjct.org](http://www.tgjct.org) Email: [editor@tgjct.org](mailto:editor@tgjct.org) ISSN: 3107-7528 (Online)

- Ministry of Petroleum and Natural Gas. (2023). *Indian petroleum and natural gas statistics*. Government of India.
- Nandy, D. (2022). *Small islands and invisible boundaries: Sovereignty, security and maritime disputes in the Indo-Pacific*. Pentagon Press.
- Pascual, C., & Elkind, J. (2010). *Energy security: Economics, politics, strategies, and implications*. Brookings Institution Press.
- Sen, A. (1999). *Development as freedom*. Oxford University Press.
- Sovacool, B. K. (2011). *The Routledge handbook of energy security*. Routledge.
- Sovacool, B. K. (2012). The methodological challenges of creating a comprehensive energy security index. *Energy Policy*, 48, 835–840.
- The Economist*. (2023). Energy geopolitics in a changing world.
- Umbach, F. (2010). Global energy security and geopolitics. *Energy Policy*, 38(3), 1229–1240.
- United Nations Development Programme. (2021). *Sustainable energy for development*.
- Winzer, C. (2012). Conceptualizing energy security. *Energy Policy*, 46, 36–48.
- World Bank. (2022). *South Asia energy outlook*.
- World Economic Forum. (2022). *Global energy transition report*.
- Yergin, D. (2011). *The quest: Energy, security, and the remaking of the modern world*. Penguin Press.

