ROLE OF ENERGY RESOURCES IN GLOBAL GEOPOLITICAL CONFLICTS

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Abstract

Energy geopolitics is a crucial intersection of international relations, resource management, and global governance. It explores how energy shapes power dynamics between nations. This field examines the strategic role of energy as both an economic necessity and a driver of geopolitical strategies. Energy geopolitics is framed by various theoretical perspectives, including realism's focus on the competitive nature of resource acquisition to maintain state power, liberalism's emphasis on institutional cooperation for global energy management, and constructivism's emphasis on the cultural and normative factors shaping energy policies and discourses. A key concern within energy geopolitics is energy security, which reflects states' efforts to ensure stable and affordable energy supplies amid evolving challenges such as the rise of renewable energy and critical mineral dependencies. Strategic energy infrastructure, like pipelines and grids, is a crucial tool in geopolitical manoeuvring, as it provides states with influence over energy flows and market access. However, the digitization of these systems introduces vulnerabilities, particularly to cyberattacks. Case studies, such as the European Green Deal, illustrate the dual potential of energy as both a tool for cooperation and a source of conflict. This review endeavours to assess the reciprocity between energy, governance, and policy. By doing so, key insights pertaining to accentuating dynamics of the rapidly changing global energy landscape within the ambit of global geopolitics are emanated.

Keywords: Energy Resources, Geopolitical Conflict, Renewable Energy, Energy Security, Energy Geopolitics

Introduction

The role of energy resources in global geopolitical conflicts has been a topic of interest for scholars and policymakers alike. The global energy landscape is characterized by uneven distribution, limited resources, and intense competition, which has led to tensions and conflicts

between nations. Energy resources have been used as a tool of power and influence, and the competition for access to energy resources has led to conflicts and cooperation between nations (Vakulchuk et al., 2020). The study of energy geopolitics is a multifarious field that draws inferences from international relations, economics, geography, and environmental studies. Energy geopolitics is concerned with the ways in which energy resources shape the interactions between nations, and how these interactions, in turn, shape the global energy landscape. The field of energy geopolitics has evolved significantly over the past few decades, driven by changes in the global energy landscape, including the rise of new energy producers, the growing demand for energy in emerging markets, and the increasing importance of renewable energy sources (Blondeel et al., 2021).

This review paper aims to provide a comprehensive analysis of the existing literature on the role of energy resources in global geopolitical conflicts. For this, the theoretical frameworks that underpin the study of energy geopolitics are examined, together with an analysis of several case studies, as well as discussion on the implications of energy geopolitics for international relations and global governance.

Theoretical Perspectives on Energy Geopolitics

The study of energy geopolitics is rooted in several theoretical frameworks, including realism, liberalism, and constructivism. Each theory provides distinct insights into how states and actors engage with energy as a strategic and economic resource.

Realists argue that energy resources are a vital component of national power and that states will compete for access to energy resources in order to maintain their position in the international system. According to realist theory, states are primarily motivated by self-interest and will pursue policies that maximize their power and security (Zhao et al., 2023). In the context of energy geopolitics, realist theory suggests that states will seek to control access to energy resources, either through direct ownership or through strategic alliances with other energy-producing states.

Realist theory has been influential in shaping the study of energy geopolitics, particularly in the context of the Middle East, where energy resources have long been a source of tension and conflict. However, realist theory has also been criticized for its failure to account for the role of non-state actors, such as energy companies and international organizations, in shaping the global energy landscape (Overland, 2019). Additionally, realist theory has been criticized for its assumption that states are unitary actors, when in fact, states are often characterized by complex domestic politics and competing interests. Realist theory posits that energy resources are fundamental to national power and security, emphasizing competition among states to control access to these resources. For realists, energy is a zero-sum commodity, and its acquisition or loss directly influences the balance of power in the international system (Bricout et al., 2022). Importantly, the strategic importance of securing energy supplies to sustain military and economic dominance is highlighted in the study of Ishakov et al., (2019). This study explains historical and contemporary conflicts over resource-rich regions, such as the Persian Gulf and the South China Sea, where energy plays a central role in geopolitical rivalry.

Liberal theory, on the other hand, argues that energy resources can be a source of

cooperation and interdependence between nations. According to liberal theory, states are not solely motivated by self-interest, but also by a desire to cooperate and achieve mutual benefits. In the context of energy geopolitics, liberal theory suggests that states will seek to establish international institutions and regimes to manage the global energy landscape and promote cooperation between energy-producing and energy-consuming states (Hafner & Tagliapietra, 2020).

Liberal theory has been dominant in shaping the study of energy geopolitics, particularly in the context of international energy governance. The International Energy Agency (IEA), for example, is an international organization that promotes cooperation between energy-producing and energy-consuming states. However, liberal theory has also been criticized for its failure to account for the power dynamics that shape the global energy landscape. Additionally, liberal theory has been criticized for its assumption that international institutions and regimes can effectively manage the global energy landscape, when in fact, these institutions and regimes are often characterized by competing interests and power struggles (Criekemans, 2018). Institutions like the International Energy Agency (IEA) exemplify liberal principles by promoting transparency, dialogue, and collective action to address shared energy challenges. Liberals emphasize the role of market mechanisms and technological innovation in optimizing energy production and distribution, reducing the risks of geopolitical competition.

Constructivist theory, on the other hand, argues that energy resources are not just a physical commodity, but also a social construct that is shaped by ideas, norms, and values. According to constructivist theory, the meaning and significance of energy resources are not fixed, but are instead constructed through social and cultural processes. In the context of energy geopolitics, constructivist theory suggests that the global energy landscape is shaped by a complex array of social and cultural factors, including ideas about energy security, energy independence, and environmental sustainability (Paravantis & Kontoulis, 2020).

Constructivist theory is fundamental especially when it comes to the study of energy geopolitics, particularly in the context of energy policy and governance. Constructivist theory has been used to analyze the ways in which energy policies are shaped by social and cultural factors, such as public opinion, interest group politics, and bureaucratic politics. However, constructivist theory has also been criticized for its failure to account for the material factors that shape the global energy landscape (Overland, 2019). Besides, constructivist theory has been criticized for its assumption that social and cultural factors are the primary drivers of energy policy and governance, when in fact, material factors, such as energy prices and energy supply, also play a significant role (Rathore et al., 2023).

Energy Diplomacy

Energy diplomacy refers to the use of energy resources as a tool of diplomacy, where energy exports are used to secure political and economic concessions. Energy diplomacy can take many forms, including energy-for-security deals, energy-for-infrastructure deals, and energy-for-technology deals. Energy diplomacy is often used by energy-producing states to secure strategic advantages and promote their national interests (Husnain et al., 2022).

One example of energy diplomacy is the deal between Russia and Ukraine, where Russia

provided discounted gas prices to Ukraine in exchange for Ukraine's agreement to extend the lease on a Russian naval base in Crimea. This deal was seen as a strategic move by Russia to maintain its influence in the region and secure its energy interests (Khan et al., 2019). Another example of energy diplomacy is the deal between China and Brazil, where China invested in Brazil's energy sector in exchange for access to Brazil's oil and gas resources (Zainab & Reza, 2022). This deal was seen as a strategic move by China to secure its energy needs and expand its influence in the region.

Energy diplomacy can also take the form of energy-for-infrastructure deals, where energy-producing states provide financing and technical assistance to energy-consuming states in exchange for access to energy resources. For example, China has provided financing and technical assistance to several African countries, including Angola and Sudan, in exchange for access to their oil and gas resources (Asif et al., 2022). Energy diplomacy can also be used as a tool of soft power, where energy-producing states use their energy resources to promote their cultural and economic interests. For instance, Qatar has used its energy resources to promote its cultural and economic interests in the Middle East and beyond, through investments in media, education, and tourism (Austvik, 2018).

Energy Coercion

Energy coercion refers to the use of energy resources as a means of coercion, where energy exports are withheld or threatened to be withheld in order to achieve political or economic goals. Energy coercion can take many forms, including energy embargoes, energy sanctions, and energy threats. One instance of energy coercion is the oil embargo imposed by Arab oil producers on the United States and other Western countries in 1973, in response to their support for Israel in the Yom Kippur War (Scholten et al., 2020). The embargo led to a significant increase in oil prices and had a major impact on the global economy.

Another example of energy coercion is the gas dispute between Russia and Ukraine in 2006, where Russia threatened to cut off gas supplies to Ukraine unless Ukraine agreed to pay higher prices. The dispute led to a significant reduction in gas supplies to Ukraine and had a major impact on the Ukrainian economy (Zhao et al., 2023). Energy coercion can also be used as a tool of political leverage, where energy-producing states use their energy resources to influence the political decisions of energy-consuming states. For instance, Russia has used its energy resources to influence the political decisions of several European countries, including Ukraine and Belarus (Inshakov et al., 2019).

Energy Competition

Energy competition refers to the competition for access to energy resources, which can lead to tensions and conflicts between nations. Energy competition can take many forms, including competition for access to oil and gas reserves, competition for access to energy markets, and competition for access to energy infrastructure. One example of energy competition is the competition for access to the oil and gas reserves of the Caspian Sea region, where several countries, including Russia, Iran, and Turkey, are vying for influence. The competition has led to

significant investments in energy infrastructure, including pipelines and ports (Su et al., 2021).

Furthermore, there is an accentuating competition for access to the energy markets of Asia, where several countries, including China, Japan, and South Korea, are vying for influence. The competition has led to significant investments in energy infrastructure, including power plants and transmission lines (Hafner & Tagliapietra, 2020). Energy competition can also lead to tensions and conflicts between nations, particularly when energy resources are scarce or when access to energy resources is limited. For example, the competition for access to the oil and gas reserves of the South China Sea has led to tensions between China and several Southeast Asian countries, including Vietnam and the Philippines (Khan et al., 2023).

Energy Security and Geopolitics

Energy security remains a cornerstone of energy geopolitics, reflecting the strategic imperative for states to secure reliable, affordable, and sustainable energy supplies. The literature identifies multiple dimensions of energy security, including diversification of supply sources, development of resilient energy infrastructure, and fostering international cooperation to mitigate supply disruptions (Rathore et al., 2023). The contested nature of energy security complicates its operationalization. Different states prioritize different aspects of energy security based on their unique vulnerabilities and strategic interests. For instance, oil-importing states like Japan prioritize the stability of maritime oil transit routes, while natural gas exporters like Russia focus on securing market access and pricing power (Khan et al., 2023).

The rise of renewable energy sources adds further perplexity, as states shift their priorities toward ensuring access to critical minerals and technologies required for green energy systems. Also, energy security is deeply intertwined with broader geopolitical dynamics. The 'resource curse' literature explores how dependence on energy exports can exacerbate domestic instability and authoritarianism, particularly in rentier states (Aasif et al., 2022). In contrast to this, energy-importing states face the "energy trilemma" of balancing affordability, sustainability, and reliability, often navigating difficult trade-offs in their energy policies (Bricout et al., 2022).

The Role of International Institutions in Energy Geopolitics

International institutions are pivotal in shaping the governance of the global energy landscape. They facilitate dialogue, mediate disputes, and promote cooperative solutions to transnational energy challenges. The International Energy Agency (IEA), established during the 1973 oil crisis, has been instrumental in fostering energy security through policy coordination, emergency response mechanisms, and the promotion of renewable energy adoption (IEA, 2020). However, the efficacy of international institutions is often constrained by structural limitations and geopolitical tensions. Institutions may reflect the interests of dominant states, leading to asymmetries in decision-making and implementation. For example, OPEC's influence over oil markets highlights how producer interests can clash with those of consuming nations, complicating global energy governance (Hogselius, 2018).

The literature also showcases the emergence of regional energy institutions, such as the European Energy Charter and the Gas Exporting Countries Forum (GECF). These institutions

address region-specific energy concerns but may also exacerbate fragmentation in global energy governance. The reciprocity between regional and global institutions highlights the need for integrated approaches to energy governance that reconcile diverse stakeholder interests (Bashir et al., 2023).

Multilateralism and Energy Governance

International institutions are pivotal in shaping the governance of the global energy landscape. They facilitate dialogue, mediate disputes, and promote cooperative solutions to transnational energy challenges. The International Energy Agency (IEA), established during the 1973 oil crisis, has been instrumental in fostering energy security through policy coordination, emergency response mechanisms, and the promotion of renewable energy adoption (IEA, 2020). However, the efficacy of international institutions is often constrained by structural limitations and geopolitical tensions. Institutions may reflect the interests of dominant states, leading to asymmetries in decision-making and implementation. For example, OPEC's influence over oil markets highlights how producer interests can clash with those of consuming nations, complicating global energy governance (Vakulchuk et al., 2020). The literature also highlights the emergence of regional energy institutions, such as the European Energy Charter and the Gas Exporting Countries Forum (GECF). These institutions address region-specific energy concerns but may also exacerbate fragmentation in global energy governance (Overland, 2019).

Energy Markets and Global Regulation

Energy geopolitics exerts profound influence on the structures and processes of global governance, shaping the norms, rules, and institutions that regulate energy production, trade, and consumption. The interdependence of energy markets and global politics underscores the need for cooperative frameworks to address shared challenges, such as climate change, resource depletion, and supply chain vulnerabilities (Blondeel et al., 2021).

Zainab & Reza (2022) argue that energy governance reflects the broader contestation between state-centric and market-driven approaches. While some states advocate for greater regulation and sovereignty over energy resources, others emphasize the liberalization of energy markets to enhance efficiency and innovation. These tensions are evident in international negotiations on carbon pricing, fossil fuel subsidies, and renewable energy targets, where divergent interests impede consensus. Moreover, the transition toward renewable energy sources introduces new dynamics in global governance. The shift from hydrocarbons to critical minerals, such as lithium and cobalt, reconfigures power relations among resource-rich and technology-leading states. The 'green geopolitics' literature explores how this transition creates opportunities for cooperation but also risks new forms of resource dependency and inequality (Austvik, 2018).

Regional Dynamics in Energy Geopolitics

Empirical case studies provide valuable insights into the complex interplay between energy, politics, and economics in different regions and contexts. The Middle East remains a focal point of energy geopolitics due to its vast oil reserves and strategic location. Yergin (1991)

highlights how the region's energy wealth has fuelled both prosperity and conflict, with external powers vying for influence over its resources. The dynamics of the Gulf Cooperation Council (GCC) states illustrate how energy revenues shape domestic policies, regional rivalries, and international alliances (Khan et al., 2019).

Similarly, the Caspian region exemplifies the geopolitics of pipeline diplomacy and energy transit routes. In this regard, Rathore et al., (2023) examine the competition among Russia, China, and Western powers for control over the region's abundant oil and gas reserves. The construction of pipelines such as the Baku-Tbilisi-Ceyhan corridor demonstrates how infrastructure projects can alter geopolitical alignments and enhance energy security for importing nations. In Africa, the 'energy for development' narrative showcases the dual challenges of harnessing energy resources for economic growth while avoiding the pitfalls of resource dependence. Case studies on Nigeria and Angola reveal how governance deficits, corruption, and conflict undermine the potential benefits of energy wealth (Criekemans, 2018). These examples further intensify the dire need for devising comprehensive strategies with a view to integrating energy development with broader socio-economic reforms.

Decarbonization and the New Energy Order

The global shift toward decarbonization represents a transformative development in energy geopolitics. The transition from fossil fuels to renewable energy sources is reshaping the power dynamics among states, creating both opportunities and challenges. Renewable energy technologies, such as solar and wind power, are inherently more decentralized than traditional hydrocarbons, enabling states to reduce their dependency on imports and enhance energy sovereignty. However, this transition also introduces new dependencies on critical minerals, such as rare earth elements, which are concentrated in a limited number of countries, including China and the Democratic Republic of Congo (Bricout et al., 2022).

The literature delineates the role of policy frameworks, technological innovation, and international cooperation in facilitating a just and equitable energy transition. Scholars like Aasif et al., (2022) & Overland (2019) have highlighted the risks of a 'green resource curse', where resource-rich states may experience similar governance and economic challenges as fossil fuel-dependent economies. Furthermore, the geopolitics of renewable energy raises questions about intellectual property rights, technology transfer, and the distribution of benefits from green technology advancements.

The Impact of Energy Geopolitics on Global Governance

Energy geopolitics exerts profound influence on the structures and processes of global governance, shaping the norms, rules, and institutions that regulate energy production, trade, and consumption. The interdependence of energy markets and global politics underscores the need for cooperative frameworks to address shared challenges, such as climate change, resource depletion, and supply chain vulnerabilities. Hafner & Tagliapietra (2020) are of the view that energy

governance reflects the broader contestation between state-centric and market-driven approaches. While some states advocate for greater regulation and sovereignty over energy resources, others emphasize the liberalization of energy markets to enhance efficiency and innovation.

These tensions are evident in international negotiations on carbon pricing, fossil fuel subsidies, and renewable energy targets, where divergent interests impede consensus. Moreover, the transition toward renewable energy sources introduces new dynamics in global governance (Paravantis & Kontoulis, 2020. The shift from hydrocarbons to critical minerals, such as lithium and cobalt, reconfigures power relations among resource-rich and technology-leading states. The 'green geopolitics' literature explores how this transition creates opportunities for cooperation but also risks new forms of resource dependency and inequality (Zhao et al., 2023).

Case Studies

The Middle East

The Middle East is home to some of the world's largest oil and gas reserves, and the region has been a major focus of energy geopolitics. The region has been characterized by significant tensions and conflicts, particularly between Iran and its neighbours, including Saudi Arabia and Israel. The region has also been characterized by significant energy competition, particularly between Iran and Saudi Arabia, which are two of the world's largest oil producers. The competition has led to significant investments in energy infrastructure, including pipelines and ports (Husnain et al., 2022).

Ukraine

Ukraine is a significant energy transit country, with several major pipelines passing through its territory. The country has been characterized by significant energy competition, particularly between Russia and Europe, which are two of the world's largest energy consumers. The country has also been characterized by significant energy coercion, particularly by Russia, which has used its energy resources to influence the political decisions of Ukraine. The coercion has led to significant tensions between Russia and Ukraine, particularly in 2006 and 2009, when Russia cut off gas supplies to Ukraine (Inshakov et al., 2019).

The South China Sea

The South China Sea is home to significant oil and gas reserves, and the region has been a major focus of energy geopolitics. The region has been characterized by significant tensions and conflicts, particularly between China and several Southeast Asian countries, including Vietnam and the Philippines. The region has also been characterized by significant energy competition, particularly between China and several Southeast Asian countries, which are vying for access to the region (Bashir et al., 2023).

The South China Sea is a critical region for energy geopolitics, with significant oil and gas reserves and major shipping lanes. The region has been characterized by tensions and conflicts between China and several Southeast Asian countries, including Vietnam and the Philippines, over territorial claims and energy resources (Scholten et al., 2020). China's energy strategy in the South China Sea is driven by its growing energy demands and its desire to reduce its dependence on imported energy. China has invested heavily in offshore oil and gas production in the region, and

has also been actively promoting its 'Belt and Road' initiative, which aims to promote economic cooperation and energy development in the region (Bricout et al., 2022).

However, China's energy strategy in the South China Sea has been met with resistance from several Southeast Asian countries, which have competing claims to the region's energy resources. The Philippines, for example, has taken China to the International Tribunal for the Law of the Sea over its territorial claims in the South China Sea, and has also been seeking to develop its own energy resources in the region (Su et al., 2021).

Vietnam has also been actively promoting its own energy development in the South China Sea, and has been seeking to attract foreign investment in its offshore oil and gas sector. However, Vietnam's energy strategy in the region has been perpetrated by its ambiguous relationship with China, which has been seeking to exert its influence over Vietnam's energy policy (Hogselius, 2018).

The Arctic Region

The Arctic region is another critical area for energy geopolitics, with significant oil and gas reserves and major shipping lanes. The region has been characterized by growing tensions between Russia, the United States, Canada, and other countries over territorial claims and energy resources. Russia's energy strategy in the Arctic region is driven by its desire to develop its offshore oil and gas resources and to promote its influence in the region. Russia has invested heavily in its offshore oil and gas production in the Arctic, and has also been actively promoting its 'Northern Sea Route' initiative, which aims to promote shipping and economic development in the region (Vakulchuk et al., 2020).

However, Russia's energy strategy in the Arctic region has been met with resistance from several other countries, including the United States and Canada, which have competing claims to the region's energy resources. The United States, for example, has been seeking to promote its own energy development in the Arctic region, and has been working to develop its offshore oil and gas resources in Alaska (Criekemans, 2018). Besides, Canada has also been actively promoting its own energy development in the Arctic region, and has been seeking to attract foreign investment in its offshore oil and gas sector. However, Canada's energy strategy in the region has been complicated by its complex relationship with the United States, which has been seeking to exert its influence over Canada's energy policy (Khan et al., 2023).

Summary of Findings

The existing literature on energy geopolitics emphasizes its pivotal role in shaping international relations through complex interactions between states, markets, and institutions. Energy is framed as a strategic asset that is central to national power and economic stability, with its significance rooted in various theoretical perspectives like realism, liberalism, and constructivism. Realist theory views energy as a zero-sum resource that drives state competition, while liberalism focuses on cooperation through institutional frameworks to mitigate conflicts. Constructivism adds a nuanced lens, considering energy as a socially constructed concept shaped by cultural, historical, and political narratives.

Furthermore, the notion of energy security emerges as multifaceted and contested,

reflecting the diverse priorities of states based on their resource dependencies and strategic objectives. The global shift toward renewable energy further complicates this landscape, introducing new dependencies on critical minerals and advanced technologies. Energy infrastructure, including pipelines, grids, and renewable energy systems, is highlighted as a strategic tool, with its control offering geopolitical leverage but also posing vulnerabilities, particularly in the context of increasing digitization and cyber threats. Regional integration initiatives, such as the European Green Deal and the African Renewable Energy Initiative, demonstrate the potential for energy systems to drive cooperation and facilitate transitions toward sustainability.

However, these efforts face challenges related to financing, governance, and aligning diverse political interests. Overall, the literature provides a comprehensive framework for understanding the interplay of power, resources, and governance, thereby, offering evidences to address the increasing challenges in the global energy landscape.

Conclusion

Considering the above articulated analysis and discussion, it can be concluded that energy geopolitics is a multifarious field that is driven by a range of factors, including energy demand, energy supply, and energy policy. The field is characterized by growing tensions and conflicts between countries over energy resources, and is likely to remain a critical area of study and analysis in the years to come. The case studies examined in this paper demonstrate the complex and often competing interests that shape energy geopolitics. The South China Sea, for example, is a critical region for energy geopolitics, with significant oil and gas reserves and major shipping lanes. The Arctic region is another critical area, with growing tensions between Russia, the United States, Canada, and other countries over territorial claims and energy resources.

The implications of energy geopolitics are far-reaching, and may perhaps have significant impacts on global energy markets and international relations. As the world's energy demands continue to grow, and as energy resources become increasingly scarce, the field of energy geopolitics is likely to remain a critical area of study and analysis. The literature on energy geopolitics offers rich theoretical insights, empirical evidence, and policy implications. By examining the reciprocity of power, resources, and governance, scholars and practitioners can better understand the challenges and opportunities of managing the global energy landscape in an era of rapid technological, environmental, and geopolitical change.

Future Research Directions

There are several future research directions that could be explored in the field of energy geopolitics. One potential area of research could be the impact of renewable energy on energy geopolitics. As the world's energy mix continues to shift towards renewable energy sources, it is likely that the field of energy geopolitics will undergo significant changes.

Another potential area of research could be the role of energy in international relations. Energy has long been a critical component of international relations, and is likely to remain so in the years to come. However, the ways in which energy shapes international relations are complex and multifaceted, and are likely to require further study and analysis.

Finally, a potential area of research could be the impact of energy geopolitics on global energy markets. Energy markets are complex and multifaceted, and are shaped by a range of factors, including energy demand, energy supply, and energy policy. The field of energy geopolitics is likely to have significant impacts on global energy markets, and is likely to require further study and analysis.

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