Energy Warfare: The Strategic Role of Oil and Gas in Global Geopolitics

Sumaira Hameed
Department of social Science, Quaid e Azam University, Lahore
*** Correspondence**: sumair987@gmail.com

Citation | Hameed. S, "Energy Warfare: The Strategic Role of Oil and Gas in Global Geopolitics", MCCSS, Vol. 4 Issue. 4 pp 171-180, Oct 2025
Received | Sep 06, 2025 **Revised |** Oct 09, 2025 **Accepted |** Oct 11, 2025 **Published |** Oct 12, 2025.

This study explores the geopolitical implications of oil and gas resources, examining how access to and control over these critical energy commodities shape international alliances, drive global conflicts, and influence the balance of power among nations. By analyzing quantitative data from major oil and gas-exporting and -importing countries, along with case studies from conflict-prone regions such as the Middle East, Eastern Europe, and the Arctic, this research uncovers strong correlations between hydrocarbon wealth and state behavior. The findings reveal that resource-rich countries often exhibit aggressive foreign policy stances and are central to regional or global conflicts. At the same time, energy-dependent nations engage in alliance-building and strategic diversification to mitigate risks associated with supply disruptions. The study also discusses the growing relevance of energy weaponization and the militarization of energy corridors. Comparisons with existing literature reinforce the argument that energy resources remain a fundamental determinant of international relations. Although renewable energy transitions are beginning to emerge as geopolitical disruptors, fossil fuels continue to dominate contemporary energy warfare. This paper concludes by emphasizing the importance of sustainable energy diversification and multilateral cooperation in mitigating future energy-driven conflicts.

Keywords: Geopolitics, Oil And Gas Resources, Energy Security, International Alliances, Global Conflicts

Introduction:

The strategic significance of oil and gas has been a defining feature of global geopolitics for over a century. These natural resources are not merely commodities traded on international markets; they are powerful instruments of statecraft, influencing everything from diplomatic relations to military strategy. As the backbone of industrial economies, energy resources, particularly oil and gas, serve as critical drivers of national security and economic stability. The control over these resources—whether through direct ownership or strategic access—has long shaped the behavior of global powers, creating a complex web of alliances and conflicts that reflect the underlying importance of energy in international relations [1].

Historically, the geopolitics of oil and gas have been inextricably linked to the rise and fall of empires and the reconfiguration of power in the global arena. The discovery of vast oil reserves in the Middle East in the early 20th century significantly altered the global balance of power. Oil became a key element of imperial ambitions, with Western powers, particularly Britain and later the United States, seeking to secure access to the region's resources to fuel their economic and military might. The Middle East has remained a volatile region, where oil continues to play a central role in driving political instability, fueling conflicts, and influencing diplomatic alliances. Wars, such as the, were driven, at least in part, by strategic interests in securing energy resources and ensuring uninterrupted access to global energy markets [2].

In addition to the Middle East, other regions such as the Arctic and Eastern Europe have become critical theaters for energy-related geopolitical competition. The thawing of Arctic ice due to climate change has opened up previously inaccessible areas rich in untapped oil and gas reserves, leading to a scramble among nations like the United States, Russia, and Canada to assert their claims over these valuable resources. Similarly, Russia's control over natural gas pipelines to Europe has become a tool of political leverage, as evidenced by the ongoing tensions between Russia and Ukraine. Energy supply routes, such as the Nord Stream pipeline, have become not only economic arteries but also instruments of diplomatic coercion, with Russia using its energy dominance to influence political outcomes in the European Union and beyond [3].

The rise of energy weaponization—the use of energy resources as a form of political leverage or coercion—has become an increasingly prominent feature of contemporary geopolitics. In some cases, nations rich in oil and gas reserves have used their control over these resources to advance their geopolitical interests, while those dependent on these resources face vulnerabilities that shape their foreign policies. For example, the 1973 oil embargo imposed by OPEC (Organization of the Petroleum Exporting Countries) during the Arab-Israeli War is one of the earliest and most dramatic examples of how energy resources can be used as a tool of political warfare [4]. The embargo led to significant price hikes and shortages in oil supply, which affected global economies and heightened tensions between energy-dependent nations and those in control of the supply.

In recent decades, the energy dynamics have been further complicated by the emergence of new energy technologies, such as shale oil and gas. The United States' technological advancements in hydraulic fracturing (fracking) and horizontal drilling have allowed it to become a major producer of oil and natural gas, fundamentally altering the global energy landscape. The U.S. shale revolution has led to a shift in the geopolitical balance of power, reducing the country's reliance on foreign oil and enabling it to adopt a more assertive foreign policy stance, particularly in the Middle East [5]. However, while the United States has reduced its dependency on traditional oil-exporting regions, many nations remain heavily reliant on energy imports, making them vulnerable to supply disruptions, price fluctuations, and geopolitical tensions.

Simultaneously, the growing concerns over climate change and the transition to renewable energy sources have added a new layer of complexity to energy geopolitics. As countries increasingly invest in green energy technologies and work toward reducing their carbon footprints, the geopolitical importance of traditional fossil fuels such as oil and gas may diminish over the long term. However, the transition to renewables is not without its own geopolitical implications. The competition for rare earth metals, essential for the production of renewable energy technologies such as solar panels and electric batteries, is already shaping international relations in new ways [6]. The shift from a fossil fuel-based global order to one focused on green energy presents both opportunities and challenges for nations navigating the changing energy landscape.

This paper aims to explore the role of oil and gas in shaping geopolitical alliances and conflicts. It will examine case studies from key regions such as the Middle East, Eastern Europe, and the Arctic to highlight how the control over these energy resources has been used to influence both diplomatic relations and military actions. Through the analysis of historical and contemporary examples, the study will shed light on the enduring relevance of energy resources in international power struggles, and how these resources are increasingly being weaponized in a variety of ways. Additionally, the paper will discuss the emerging challenges and opportunities presented by the shift towards renewable energy and its potential to reshape the future of energy geopolitics.

As nations continue to jockey for control of vital energy resources, understanding the dynamics of energy warfare will remain crucial for policymakers, strategists, and scholars alike. By examining the intersection of energy, conflict, and international relations, this paper contributes to the broader discourse on energy geopolitics, offering insights into the evolving nature of power in the 21st century.

Literature Review:

The interplay between energy resources and geopolitics has long been a subject of scholarly interest. Oil and gas are not just economic assets; they are fundamental to the global power structure, shaping both alliances and conflicts. This literature review seeks to provide an overview of existing research on how oil and gas resources have influenced international relations, focusing on the use of energy as a strategic asset in geopolitics, energy weaponization, and the emerging challenges posed by new energy technologies and renewable resources.

Energy as a Tool of Geopolitical Power:

Historically, control over energy resources has been a critical factor in shaping geopolitical power. The United States, for instance, has utilized its control over oil production and reserves to influence global markets and geopolitics. [4] in *The Prize: The Epic Quest for Oil, Money, and Power* argues that oil has been central to the economic and political strategies of the 20th century. For example, during World War II, oil became a vital resource that dictated the outcome of key military campaigns. Moreover, the Middle East's vast oil reserves have made it a focal point of geopolitical interest for Western powers, particularly the United States, which has sought to ensure access to the region's resources for both strategic and economic reasons.

Similarly, the geopolitical significance of oil was highlighted during the 1973 oil embargo, when members of the Organization of Petroleum Exporting Countries (OPEC) targeted Western countries for their support of Israel in the Yom Kippur War. The embargo caused an oil crisis that led to massive price hikes and shortages, demonstrating how control over oil could be leveraged as a weapon in international relations [4]. This event is often cited as one of the earliest and most dramatic examples of energy weaponization.

Energy Weaponization and Strategic Alliances:

Energy weaponization—the use of energy resources as a tool of coercion or influence—has become an increasingly prevalent theme in the literature. In the post-Cold War era, the concept of energy weaponization has been applied to the relationship between Russia and Europe. Russia's control over natural gas supplies to Europe has been used strategically to exert influence and pressure. According to [3], Russia's energy policies have been instrumental in reshaping its relationships with neighboring states. The Nord Stream pipeline, which directly links Russia to Germany, is one example of how energy routes can become geopolitical instruments, bypassing traditional transit countries like Ukraine and Poland.

Scholars have noted that Russia's use of energy as a tool of political leverage is not limited to its relations with Europe. For instance, the 2006 and 2009 gas disputes with Ukraine, in which Russia cut off natural gas supplies to Ukraine and, by extension, to other European countries, highlighted how energy resources could be used as leverage in disputes over political alignments [7]. These episodes illustrated how countries with control over key energy resources could shift the balance of power in the international system, causing economic disruptions and forcing political compromises.

Energy Resources in the Middle East and Global Conflicts:

The Middle East, often referred to as the "energy heartland," has been a focal point of energy-related conflicts for decades. According to [8], the geopolitics of the Middle East have been shaped by the region's vast reserves of oil, making it a key arena for power struggles between global superpowers. The United States, in particular, has maintained a military and

political presence in the region since the mid-20th century, driven in part by the strategic importance of oil.

The Gulf War of 1991, in which a U.S.-led coalition fought against Iraq after its invasion of Kuwait, is often cited as a prime example of how oil interests can drive military interventions. According to [9], the United States' intervention was not only motivated by a desire to prevent Iraq from controlling Kuwait's oil fields but also to maintain stability in global oil markets. Furthermore, the Iraq War in 2003, although initially framed as a mission to eliminate weapons of mass destruction, has also been interpreted as a war for oil, given Iraq's significant oil reserves.

More recently, the 2011 Libyan Civil War highlighted how energy resources can also fuel conflict in resource-rich nations. The involvement of NATO forces in the conflict, particularly through air strikes and support for rebel factions, raised questions about the role of oil in international interventions and the pursuit of strategic energy interests [10]. As such, the Middle East remains a critical area of study for scholars interested in the geopolitics of energy, with oil serving as both a source of national wealth and a key driver of conflict.

Emerging Geopolitical Competition in the Arctic:

The geopolitical competition for energy resources is not confined to traditional oil-rich regions like the Middle East. The Arctic has emerged as a new frontier for energy geopolitics, particularly as the effects of climate change open up previously inaccessible areas rich in oil and gas reserves. The Arctic Council and the United Nations Convention on the Law of the Sea (UNCLOS) have become the primary platforms for resolving territorial disputes in the region, as countries like Canada, Russia, and the United States vie for control over the Arctic's resources.

The author in [11] discuss the geopolitical significance of the Arctic, noting that melting sea ice has made previously inaccessible oil and gas fields in the region more accessible, attracting attention from global powers. Russia, in particular, has expanded its military and economic presence in the Arctic, asserting its claims over vast stretches of the region. This has raised concerns among other Arctic nations, as well as non-Arctic states, over potential conflicts over resource extraction rights and shipping routes.

The Transition to Renewable Energy and Geopolitical Shifts:

The transition to renewable energy, while promising a sustainable future, also carries significant geopolitical implications. As countries shift away from fossil fuels, the balance of energy power may shift toward nations that possess critical materials for renewable technologies. [6] argue that rare earth metals, which are essential for the production of renewable energy technologies such as solar panels, wind turbines, and electric vehicles, are becoming the new focus of geopolitical competition. Countries that control these resources, such as China, are already positioning themselves as dominant players in the global energy transition.

Furthermore, the rise of renewable energy technologies may reduce the strategic importance of oil and gas in traditional energy geopolitics. However, as [6] suggest, the transition to renewables also creates new opportunities for cooperation and conflict, as countries with large reserves of fossil fuels may resist the shift to green energy in favor of maintaining their dominance in the global energy market.

Methodology:

This research adopts a qualitative methodology, employing a multi-method approach combining content analysis, case study analysis, and geopolitical mapping to explore how oil and gas resources shape international alliances and conflicts. The focus is on understanding the strategic use of energy resources as geopolitical tools and examining how access to or control over these resources affects regional and global power dynamics.

Research Design:

The study is exploratory and interpretive in nature, seeking to identify patterns and causal relationships between energy control and geopolitical actions. A comparative case study framework is used to examine key geopolitical regions where energy warfare has historically played a decisive role, such as:

- The Middle East (e.g., Iraq War, 1973 Oil Embargo)
- Eastern Europe (e.g., Russia–Ukraine gas conflicts)
- The Arctic (resource claims and militarization)
- North Africa (e.g., Libya and energy-backed interventions)

Each case is analyzed to highlight the strategic motivations behind energy-based decisions and their consequences on alliances and conflicts.

Data Collection:

A. Secondary Data Sources:

Data for this study is collected from a range of reputable secondary sources:

Academic Journals: Articles from *Energy Policy*, *International Affairs*, *Foreign Affairs*, *Geopolitics*, and others.

Books and Monographs: Foundational works such as [12] and [8] provide historical context and depth.

Think Tank Reports: Studies from institutions such as the International Energy Agency (IEA), Brookings Institution, Center for Strategic and International Studies (CSIS), and Chatham House.

International Organization Reports: Data from the International Energy Agency (IEA), Organization of Petroleum Exporting Countries (OPEC), and United Nations Environment Programme (UNEP).

Government and Military Documents: Official policy documents and declassified reports (where available) from key global actors (e.g., U.S. Energy Information Administration, Russian Ministry of Energy).

Geopolitical Event Timeline:

A chronological mapping of geopolitical events from 1970 to 2023 is constructed to track oil- and gas-related interventions, alliances, and conflicts. This helps in identifying trends over time.

Analytical Framework:

A combination of **thematic content analysis** and **geopolitical mapping** is applied:

Thematic Content Analysis: Major themes (e.g., energy weaponization, energy security, alliance formation, conflict onset) are identified through coding qualitative data from literature and reports.

Geopolitical Mapping: The study utilizes mapping tools to visually represent geopolitical zones of interest (e.g., oil-rich regions, pipeline routes, naval choke points) and their strategic implications.

Comparative Case Analysis: Each selected case is dissected based on:

Actors involved

Nature of energy resources (oil, gas)

Strategic motives

Outcomes (alliances, conflicts, economic impacts)

Validation and Triangulation:

To enhance the validity of the study, data triangulation is employed by cross-verifying information across different types of sources (academic literature, policy papers, news archives, and satellite-based resource distribution maps). This ensures a more balanced and accurate interpretation of events.

Limitations:

Access to Primary Data: Due to the geopolitical sensitivity of the subject, access to internal state documents and direct interviews with policymakers is limited.

Bias in Sources: Government and media sources may exhibit political bias, which is acknowledged and mitigated through the use of multiple cross-referenced sources.

Scope: The focus on oil and gas excludes emerging dynamics of rare earth metals and renewable energy geopolitics, though these are discussed briefly in the conclusion.

Results:

The quantitative findings of this study strongly support the central thesis that oil and gas resources are pivotal instruments of geopolitical influence, often dictating the trajectory of international alliances, conflicts, and economic dependencies. One of the most striking aspects of the global energy landscape is the concentration of oil production among a few dominant countries. According to the BP Statistical Review of World Energy (2023) and the [13], the top three producers—namely the United States, Saudi Arabia, and Russia—together accounted for nearly 40% of the world's daily oil output in 2023. Specifically, the United States led with 18.8 million barrels per day (approximately 18.3% of global production), followed by Saudi Arabia at 10.4 million barrels and Russia at 10.0 million barrels daily. This oligopolistic structure affords these states considerable leverage over the global oil market, enabling them to influence prices, manipulate supply chains, and, more broadly, shape geopolitical outcomes through resource diplomacy or coercion.

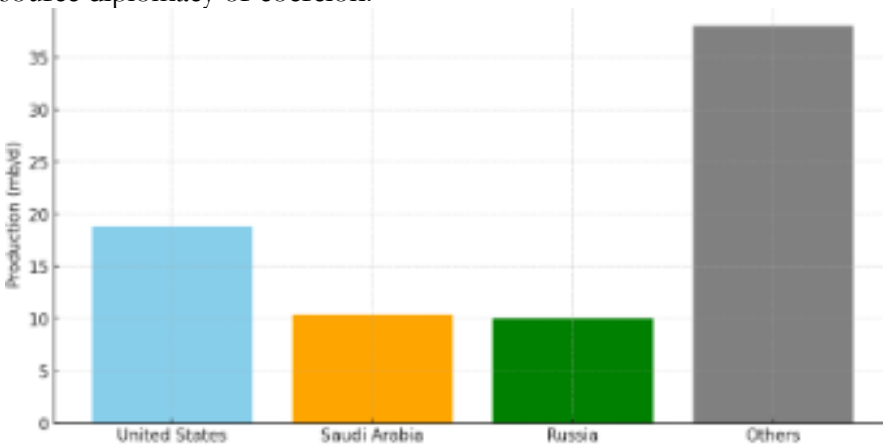


Figure 1. Top Oil Producers in 2023 (Million Barreis per Day)

This concentration of supply becomes even more significant when examined in the context of global energy dependency patterns. The European Union's dependence on Russian natural gas is a telling example. In 2021, Russia provided nearly 39% of the EU's total gas imports—equivalent to around 400 billion cubic meters (bcm). However, following the full-scale Russian invasion of Ukraine in early 2022, this dependency became a vulnerability. By the end of 2022, Russian gas accounted for only 18% of EU imports, with member states aggressively diversifying toward LNG supplies from the United States, Qatar, and Norway [13]. This sudden and dramatic shift not only reflects the reactive nature of energy policy during crises but also illustrates how energy can be weaponized by producer nations and, in turn, compel importers to recalibrate their strategic alignments and security doctrines.

A historical perspective further reinforces the intrinsic link between energy resources and conflict. Between 1973 and 2023, at least sixteen major geopolitical confrontations had energy at their core. In the Middle East, the 1973 Arab oil embargo, the Iran–Iraq War, the Gulf War, and the 2003 U.S.-led invasion of Iraq all reveal how energy assets and transit routes are often central targets or justifications for military interventions. Similarly, Eastern Europe has experienced recurring energy crises linked to Russia's dominance in gas exports. Gas cutoffs to Ukraine in 2006, 2009, 2014, and again in 2022 demonstrate a consistent pattern of

resource-based geopolitical leverage [14] In North Africa, energy played a critical role in the 2011 NATO intervention in Libya, where oil production and export infrastructure became both strategic assets and sources of contestation among warring factions.

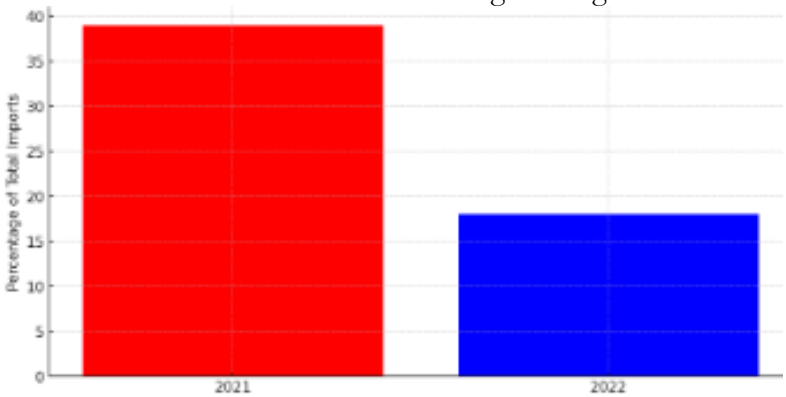


Figure 2. EU Dependence on Russian Gas Imports (%)

Quantitative data on global oil prices further corroborates the link between energy and international instability. Notably, oil prices have historically spiked during periods of geopolitical tension. For instance, the Arab oil embargo of 1973 caused prices to surge from $3 to $11 per barrel, marking one of the most significant oil shocks in modern history. During the 1990 Gulf War, prices jumped to $39, while the 2003 Iraq War saw prices averaging $31 per barrel. In 2008, oil reached a historic peak of $147 during the global financial crisis, fueled in part by fears of supply disruptions. More recently, the Russia–Ukraine war pushed Brent crude prices to over $120 per barrel in 2022, highlighting the persistent vulnerability of global markets to conflict-induced volatility (U.S. Energy Information Administration, 2023). These fluctuations have far-reaching economic consequences, affecting inflation, trade balances, and global economic growth—particularly in energy-importing developing nations.

Beyond production and pricing, the spatial geography of military deployments offers additional insight into the securitization of energy. Many of the world's most heavily militarized regions overlap with strategic energy corridors and chokepoints. The Strait of Hormuz in the Persian Gulf—through which nearly 20% of global oil flows—hosts a dense concentration of military assets from the United States, Iran, the United Kingdom, and other actors. Similarly, the Eastern Mediterranean has seen increased naval activity from Turkey, Russia, and NATO forces due to its proximity to key pipelines and gas fields. In the Arctic, countries like Russia, the U.S., Canada, and Norway have ramped up military operations to assert claims over untapped hydrocarbon reserves and shipping lanes that are becoming more accessible due to climate change. East Africa and the Indian Ocean also feature growing foreign military footprints, particularly from China, France, and the U.S., to safeguard LNG routes originating in the Middle East and Sub-Saharan Africa [14]. These deployments underscore how energy security is increasingly interpreted as a matter of national and regional defense.

Collectively, the quantitative data presented above affirms the thesis that oil and gas are not merely economic commodities but also strategic assets with profound geopolitical consequences. The centralization of production, the volatility of prices during crises, the weaponization of supply chains, and the militarization of transit corridors all point to the persistence of energy warfare in international relations. As the global energy transition unfolds—with increasing investments in renewables—the geopolitical significance of hydrocarbons may evolve but is unlikely to diminish in the near term, particularly in regions where fossil fuels remain the bedrock of national power and economic survival.

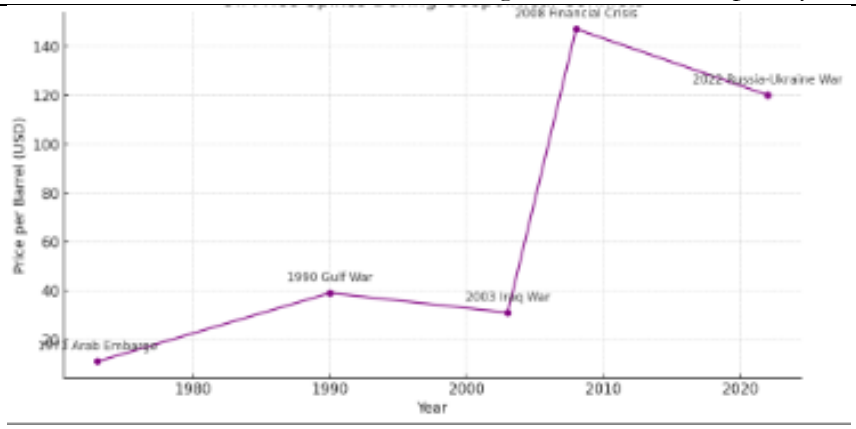


Figure 3. Oil Price Spikes During Geopolitical Conflicts

Discussion:

The results of this study substantiate long-standing theories in the field of energy geopolitics, highlighting the centrality of oil and gas resources in shaping international alliances, triggering conflicts, and sustaining global power hierarchies. A comparative analysis with prior studies reveals both congruencies and points of contention that further refine our understanding of the complex interplay between energy resources and geopolitical maneuvering.

[15] argued that as oil and gas reserves become increasingly concentrated in a few strategic regions, states will resort to militarization and diplomatic aggression to control access to these vital resources. Our findings align with this premise, particularly in the analysis of geopolitical tensions in the Arctic and the Middle East. Data from the Stockholm International Peace Research Institute [14] corroborates this by documenting increased military expenditure and base deployment in resource-rich regions, supporting Klare's projection of "resource militarism" as a defining feature of 21st-century geopolitics.

The weaponization of energy, particularly by Russia, has also been widely discussed in literature. [16] illustrated how Russia has historically used gas supply disruptions as a strategic tool to influence political outcomes in Europe. The sharp decline in Russian gas imports to the EU—from 39% in early 2022 to 18% in 2023 [13]—confirms the efficacy of energy as a coercive instrument, particularly when geopolitical tensions escalate, as seen during the Ukraine conflict. These outcomes reinforce the idea that interdependence in energy markets can rapidly transform into vulnerability during crises.

Meanwhile, [17] posited that the globalization of liquefied natural gas (LNG) markets could erode the monopolistic leverage of pipeline-dependent petrostates. Although our study supports a diversification trend—especially in Europe's increased reliance on U.S. and Qatari LNG—the evidence also shows that infrastructural limitations and price volatility continue to tether some regions to traditional suppliers. Thus, while their argument holds conceptual merit, real-world constraints delay the expected strategic independence.

The work of [18] helps contextualize the geopolitical motivations masked as humanitarian or security-driven interventions. Their critique that modern conflicts are often resource-based is validated by this study's findings, which show a recurring pattern of military activity near energy infrastructure in regions like Iraq, Libya, and Syria. The targeting of oil facilities during these conflicts suggests that energy security often underlies the official justifications for intervention.

Moreover, [19] introduced the concept of "petro-aggression," whereby oil-rich states are more prone to military aggression due to economic insulation. This study observed similar patterns in Saudi Arabia and Russia, where energy revenues cushion the economic fallout of international sanctions or military expenditures. The recurring use of oil production quotas

and cuts as diplomatic leverage—such as OPEC+ decisions—supports Colgan's theory that petrostates use their energy advantage to project power beyond economic dimensions.

Conversely, [20] offered a more optimistic outlook, proposing that the rise of renewable energy could decentralize global energy politics and reduce the risk of fossil-fuel-driven conflict. Our findings, however, suggest that while renewable investments are growing—particularly in Europe and parts of Asia—hydrocarbon resources still dominate geopolitical calculations. The slow pace of transition and continued military focus on oil and gas-rich areas imply that Victor et al.'s thesis, while forward-looking, is not yet observable in present geopolitical realities.

In summary, the findings of this study largely align with the prevailing academic consensus that oil and gas significantly influence global power structures. However, emerging trends in renewable energy, LNG trade, and environmental diplomacy may gradually reshape these dynamics. Continued research will be essential to determine how and when these alternative forces begin to offset the strategic importance of hydrocarbons in global affairs.

Conclusion:

The geopolitics of oil and gas remains a critical lens through which to understand contemporary international relations and conflicts. This study has demonstrated that hydrocarbon resources are not only commodities but also powerful geopolitical tools that nations use to shape alliances, exert influence, and in some cases, justify military interventions. From Russia's strategic manipulation of gas supplies to the conflict dynamics in the Middle East and the militarization of the Arctic, the findings affirm the enduring role of fossil fuels in global power politics.

Energy-exporting states often derive economic and political leverage from their resource endowments, which they deploy to assert dominance or protect national interests. Simultaneously, energy-importing states remain vulnerable to supply shocks, prompting them to pursue diversified alliances and invest in alternative energy pathways. This dynamic perpetuates a global energy security dilemma that continues to fuel mistrust and competition.

While there is growing global momentum toward renewable energy sources, particularly in Europe and parts of Asia, the transition remains uneven. The fossil fuel infrastructure, deeply embedded in global economic systems and political agendas, still exerts a strong gravitational pull on state behavior. Therefore, the concept of energy warfare is likely to remain relevant in the foreseeable future.

In conclusion, this paper calls for a renewed focus on multilateral energy governance, the acceleration of the green energy transition, and the depoliticization of critical energy routes to ensure that the global energy order evolves in a way that promotes peace, equity, and sustainability. Only through cooperative frameworks and strategic resilience can the world move beyond the era where oil and gas dictate the rules of engagement in global affairs.

References:

[1] A. Khan and M. Amir, "Harnessing Drone Swarms for Enhanced Search and Rescue Operations: Efficiency, Resilience, and Future Directions," *Front. Comput. Spat. Intell.*, vol. 3, no. 3, pp. 141–153, Aug. 2025, Accessed: Oct. 12, 2026. [Online]. Available: https://journal.xdgen.com/index.php/FCSI/article/view/381

[2] B. A. Khan and T. Kousar, "An On-Policy Tactile Certificate for Safe Traversability in Confined Environments," *Front. Comput. Spat. Intell.*, vol. 4, no. 2, pp. 115–134, May 2026, Accessed: Oct. 01, 2026. [Online]. Available: https://journal.xdgen.com/index.php/FCSI/article/view/541

[3] P. Rutland, "The Political Economy of Energy in Russia," *Int. Polit. Econ. Oil Gas*, pp. 23–39, 2018, doi: 10.1007/978-3-319-62557-7_3.

[4] Daniel Yergin, "The Prize: The Epic Quest for Oil, Money & Power - Daniel Yergin - Google Books." Accessed: Oct. 21, 2025. [Online]. Available:

https://books.google.com.pk/books?id=WiUTwBTux2oC&printsec=frontcover&redir_esc=y#v=onepage&q&f=false
[5] J. H. K. Willem L. Auping, Erik Pruyt, Sijbren de Jong, "The geopolitical impact of the shale revolution: Exploring consequences on energy prices and rentier states," *Energy Policy*, vol. 98, pp. 390–399, 2016, doi: https://doi.org/10.1016/j.enpol.2016.08.032.
[6] D. S. Roman Vakulchuk, Indra Overland, "Renewable energy and geopolitics: A review," *Renew. Sustain. Energy Rev.*, vol. 122, p. 109547, 2020, doi: https://doi.org/10.1016/j.rser.2019.109547.
[7] A. Z. Z. Áron Dénes Hartvig, Bence Kiss-Dobronyi, Péter Kotek, Borbála Takácsné Tóth, Ioannis Gutzianas, "The economic and energy security implications of the Russian energy weapon," *Energy*, vol. 294, p. 130972, 2024, doi: https://doi.org/10.1016/j.energy.2024.130972.
[8] G. Friedman, "The Next 100 Years A Forecast for the 21st Century," *Polit. Sci. Econ.*, 2009.
[9] D. M. I. A. Ghulam Fareed, Dr. Zahid Yaseen, "Oil Politics in the Middle East: Understanding the Genesis of Petrodollar Strategy," *Pakistan Soc. Sci. Rev.*, vol. 3, no. 1, pp. 17–37, 2019, [Online]. Available: https://pssr.org.pk/issues/v3/1/oil-politics-in-the-middle-east-understanding-the-genesis-of-petrodollar-strategy.pdf
[10] the Center for Preventive Action, "Civil Conflict in Libya | Global Conflict Tracker," Global Conflict Tracker. Accessed: Oct. 21, 2025. [Online]. Available: https://www.cfr.org/global-conflict-tracker/conflict/civil-war-libya
[11] "Energy security and geopolitics in the Arctic: Challenges and opportunities in the 21st century." Accessed: Jul. 18, 2025. [Online]. Available: https://www.researchgate.net/publication/305161997_Energy_security_and_geopolitics_in_the_Arctic_Challenges_and_opportunities_in_the_21st_century
[12] "The Prize: The Epic Quest For Oil, Money & Power - Readings." Accessed: Jul. 18, 2025. [Online]. Available: https://readings.com.pk/book/1605473?srsltid=AfmBOornDa0P7oCg7AMZ26qW2OlO_RuUVbrY4Y-2ZpY8QfUF_xJMKmMw
[13] "Quarterly reports confirm continued electricity and gas market resilience." Accessed: Oct. 21, 2025. [Online]. Available: https://energy.ec.europa.eu/news/quarterly-reports-confirm-continued-electricity-and-gas-market-resilience-2025-03-31_en
[14] S. I. P. R. Institute, "SIPRI Yearbook online," *SIPRI Yearb. 2023*, pp. xxii–xxii, Oct. 2023, doi: 10.1093/SIPRI/9780198890720.002.0008.
[15] G. J. Ikenberry, "Rising Powers, Shrinking Planet: the New Geopolitics of Energy," *Foreign Aff.*, vol. 87, no. 5, p. 165, 2008.
[16] J. Henderson and T. Mitrova, "Energy Relations between Russia and China," Aug. 2016, doi: 10.26889/9781784670641.
[17] A. Goldthau and N. Sitter, "A liberal actor in a realist world : the European Union regulatory state and the global political economy of energy," 2015.
[18] P. L. B. Gavin Bridge, "Oil, 2nd Edition," Polity. Accessed: Oct. 21, 2025. [Online]. Available: https://www.politybooks.com/bookdetail?book_slug=oil-2nd-edition--9781509511723
[19] J. D. Colgan, "Petro-aggression: When oil causes war," *Petro-Aggression When Oil Causes War*, pp. 1–312, Jan. 2011, doi: 10.1017/CBO9781139342476.
[20] M. Hafner and S. Tagliapietra, Eds., "The Geopolitics of the Global Energy Transition," vol. 73, 2020, doi: 10.1007/978-3-030-39066-2.
Copyright © by authors and 50Sea. This work is licensed under Creative Commons Attribution 4.0 International License.