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ENERGY SECURITY IN WEST EUROPE: HISTORICAL PERSPECTIVES AND POST UKRAINE WAR

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ABSTRACT

*In West Europe ,many ups and downs had taken place in terms of Energy Security since WWII. Historically,the 1973 oil crisis and 1979 oil crisis are the key Historical events that had influenced West European energy security.Because of changing energy markets, historical developments and geopolitical movements,West Europe's energy security has been a major worry for years.This essay examines the development of energy security in West Europe,noting its historical foundations,the influence of significant geopolitical occurrences.Internal policy changes and external forces have significantly changed West Europe's energy security and the continent still faces obstacles that call for a well-thought-out response.The invasion of Russia on Ukraine in 2022 has further exacerbated the crisis of Energy.The European Union has been working hard to ensure safe levels of energy security,yet they are not getting the results they want.In this write up, the energy security in West Europe ,its historical perspectives and present day challenges will be analyzed under Geopolitical theory.Moreover, recommendations will be suggested to coup up with the situation effectively.*Keyterms:Geopolitics,Energy security,Green Energy

INTRODUCTION

It is crucial to define energy security in the context of West Europe before exploring its historical development. Energy security is defined as a condition in which a nation perceives a high probability that it will have adequate energy supplies(including traditional sources such as firewood, plant and animal residues that are frequently not traded in marketplace)at affordable prices.Energy security has traditionally been understood to mean having a sufficient and consistent supply of energy at a fair price.But the idea has grown to encompass resilience to supply disruptions,sustainability and the geopolitical implications of energy dependence.International relations and the dynamics of the world market,in addition to local elements like energy consumption and technological capabilities, have an impact on West European energy security. Energy security,in its broadest sense, refers to the uninterrupted availability of energy sources at an affordable price.It encompasses various dimensions, including the reliability of energy supplies,the economic accessibility of energy resources,the environmental sustainability of energy production and consumption and the resilience of energy systems against potential disruptions.There are two principal economic and political components of energy security.First is the set of all actions that effect the quantity and reliability of indigenous energy supplies.The second includes actions affecting energy supplies.The two components are closely linked,especially in that problems with indigenous supplies create pressure for increasing energy imports.It is the external component,energy imports that poses most immediate threats to national security.

Energy security is not a static concept; it evolves in response to changing geopolitical, economic, and technological landscapes.Traditionally, energy security focused on ensuring a stable supply of fossil fuels, particularly oil and natural gas.However,in recent years,this concept has expanded to include the

diversification of energy sources,the transition to renewable energy and the need to mitigate the impacts of climate change.West Europe's geopolitical interactions,resource availability and geographic location have all influenced the region's energy security problems throughout history (Elbassoussy, 2019).Throughout the 20th century,West Europe's reliance on outside suppliers especially those from the Middle East, Russia and North Africa had a significant impact on its energy security.This dependence was especially noticeable during significant historical moments.West Europe is not self-sufficient in its energy and so it depends heavily on other countries especially Russia,Middle Eastern countries and central Asian republics.

By the end of the 20th century,maintaining access to internationally traded fuels, particularly oil, remained at the core of energy security,but it was longer solely a geopolitical issue.The inclusion of natural science,engineering and economics in discussions of energy security was prompted by the necessity to consider the weaknesses of intricate technical systems,global constraints and the significance of markets and investments (Szulecki, 2018).Simultaneously,the most noteworthy concept within the energy security community.

For nations that rely heavily on imports to meet their energy demands, risk dispersion is essential to enhancing energy security.Through diversification of energy supplies,energy sources and manufacturing sites (globalization),they can achieve this strategy,which enables them to secure an adequate energy supply to satisfy their economic and societal demands and objectives.Improving energy self-sufficiency and lowering the amount of energy imported are other crucial steps in increasing energy security.Safety and security in oil lie in variety and variety alone(Winston Churchill) (D.Yergin, 2006)

Over half of the energy consumed in West Europe comes from imports,with daily import costs exceeding €1 billion.For natural gas and crude oil in particular, import dependence is significant. 90% of West Europe's overall demand for crude oil and 66% of its demand for natural gas came from imports in 2012. A large number of European Union (EU) nations also largely depend on a single external provider (such as Russia) for their imports of energy and natural gas.39% of all natural gas imports into the EU came from Russia in 2013.In actuality,71% of Russia's gas exports to West Europe go to Germany and Italy.Norway is the third-largest supplier of gas and oil after Saudi Arabia and Russia, making approximately 31% of the EU's total imports of natural gas and 11% of its imports of crude oil were made in 2012 (Energy statistics Database, 2012).The EU has tried to diversify its energy supplies in the wake of the Ukraine conflict.For instance,the Baltic nation of Lithuania built a liquefied natural gas terminal in 2014,allowing it to import gas from Norway and end Russia's gas monopoly.

In the long run,Russia is a major natural gas supplier to West Europe but Hartley and Medlock III found that its impact on the global natural gas market will be minimal.The same analysis did point out that a concerted effort by Russia and the Middle East would be more dangerous for global energy security.Additionally,Holz et al predicted that Russia will remain a significant supplier to West Europe without taking center stage.

The concept of strategic autonomy has become increasingly popular among academics and policymakers in West Europe.This entails making sure that West Europe can make independent decisions free from undue influence from outside sources in addition to lowering its reliance on Russia for energy. Energy diversification, infrastructure investments (such LNG terminals)and the creation of an EU-wide energy strategy are all included in the concept of strategic autonomy.

Theoretical Framework

In the theoretical framework,Geopolitical theory of Fredrich Reitzel and Halford Mackinder are used.It focuses on how the control and distribution of energy resources would influence the global power dynamics.This examines the strategic importance of energy corridors,resource-rich regions and the geopolitics of climate change.Energy geopolitics has become increasingly important as countries compete for access to energy resources, influencing international relations,conflicts and global policies on energy transition and climate change.Analyzing **policy decisions**,diplomatic strategies and the influence of international bodies like the European Union (EU) requires qualitative data. By utilizing

secondary data such as historical records,past policy documents,treaties and previous research studies,we can track the evolution of energy security concerns.Mackinder holds Central Eurasia as a key to Global domination in terms of energy.The main imports of energy were from Middle East and Russia.Taking in view,West Europe has been faced with the issue of Energy security since WWII.The heavy dependence over Middle East has been shocked by Oil Crisis of 1973 and 1979.While dependence over Russia has been shocked in the last two decades.The recent invasion of Russia in Ukraine poses a serious threat to their Energy security in historical as well as current scenarios.

Post WWII: Reconstruction and the Marshal Plan(1945-1950s)

Since the conclusion of World War II,energy security has been a top priority for the nations of Europe.Modern West European energy policy have their roots in the continent's wartime experiences and the subsequent political and economic rehabilitation.As technology has advanced and energy demands have changed throughout the years,West Europe's approach to energy security has also changed.West Europe suffered severe economic and infrastructural damage,notably to its energy sector, following World War II.West Europe had a difficult time reconstructing its energy infrastructure following World War II.

Origins of Soviet Energy Exports to West Europe in the 1950s and 1960s:

Europe was split into two blocs during the early stages of the Cold War,the Soviet Union-led Eastern Bloc and the United States-led Western Bloc.Each bloc aimed to minimize reliance on the other while securing its own energy security.
With its enormous oil and gas reserves,Soviet Union started to use these resources for both internal development and as a means of gaining global clout.As part of the Council for Mutual Economic Assistance (COMECON), the Soviet Union initially provided oil and gas to nations in Eastern West Europe,securing their reliance on Moscow politically and economically.

Initially,coal which was plentiful in Western Europe was the main source of energy dependence. Energy dependency was more regional throughout the continent in the early stages of the Cold War,when the Soviet Union had not yet emerged as a significant energy provider to Western Europe.Under Soviet influence,the USSR started to position itself as a major provider of energy in Eastern Europe.Eastern European nations under Soviet domination were included into a system in which Moscow centrally handled all energy sources,including gas and oil.As a result, these nations developed an early pattern of reliance on Soviet energy supplies.For both American and West European administrations,rebuilding West Europe was of utmost importance.Financial assistance for the reconstruction of West European economy including improvements in energy infrastructure, was given by the Marshall Plan (1948).During this time,initiatives were made to increase energy efficiency, reconstruct the coal industry and modernize energy systems.One of the most important steps toward unifying energy policies and averting future disputes over coal and steel resources was the establishment of the European Coal and Steel Community (ECSC) in 1951.Specifically for coal and steel,the ECSC was founded in 1951 as a supranational body to control industrial production under a common market.In order to avoid confrontations and guarantee steady energy supply,the ECSC sought to consolidate the steel and coal sectors among its member states.Closer economic and energy cooperation among West European nations was made possible by the ECSC which served as a model for the European Union.It encouraged cooperative administration of the steel and coal industries which is essential for both economic recovery and energy security.

The primary energy source during the 1950s and 60s changed from coal to oil,primarily as a result of the Middle East's cheap oil becoming more widely available and industrialization happening quickly.Energy security in West Europe was greatly impacted by the continent's growing reliance on foreign oil.The 1956 Suez Crisis highlighted how vulnerable West Europe's energy supply was since disruptions in the Middle East's oil supply had a major negative economic impact.

In the course of the Cold War, the Soviet Union became a significant producer and exporter of natural gas and oil. After discovering substantial oil and gas

deposits in Siberia and other areas by the 1960s,Soviet Union started to consider Western Europe as a possible market.Rapid industrialization and economic expansion in Western Europe needed reliable and reasonably priced energy sources to keep the continent moving forward.It was becoming more and more clear how the Soviet Union planned to use its enormous energy resources to gain global clout.Exporting natural gas and oil, more significantly,became a means of obtaining hard currency and influencing political decisions in West European nations.

Several Western European nations started buying Soviet energy,especially natural gas in the 1960s despite their differing ideologies.These partnerships were the result of Western Europe's economic pragmatism, which aimed to diversify energy sources in the face of falling domestic output and rising demand.

The Oil Crisis of the 1970s

Oil crisis has taken place in the decades two time.Firstly,1973 oil crisis triggered by Yom Kippur war caused significant economic disruptions and a sharp increase in energy prices.Due to restrictions on oil supplies,West European nations saw severe inflation and energy shortages.The Oil Crisis of 1973 was a pivotal moment in the history of West European energy security policy. The difficulties associated with relying solely on Middle Eastern oil were made clear by the dramatic rise in oil prices and shortages caused by the Arab oil embargo.

By the end of 1974,the price of crude oil had nearly quadrupled from about $3 per barrel to nearly $12 due to the embargo.West Europe suffered greatly because of its heavy reliance on oil imports. The crisis made West Europe's reliance on foreign energy sources more vulnerable,which resulted in inflation,recessions and a reevaluation of energy policy.

As a result,these nations started to invest in alternative energy technologies,boost energy efficiency and diversify their energy sources.In order to provide a coordinated response to upcoming energy crisis and to coordinate energy policy among industrialized nations,particularly West Europe,the International Energy Agency (IEA) was founded in 1974.

Secondly,1979 Oil crisis,which was exacerbated by the Iranian Revolution put further burden on West European economies and highlighted the need for better energy security plans and energy diversification.The crisis hastened the call for energy independence,renewable energy technology development and energy conservation measures.

Natural gas became a vital energy source in West Europe in the 1970s and 1980s.By means of pipelines, the Soviet Union emerged as a significant provider of natural gas to Western Europe, hence establishing West Europe's reliance on Russian energy.But geopolitical conflicts, particularly during the Cold War, always served as the foundation for this partnership.West Europe kept becoming more and more dependent on Soviet gas despite these tensions since the Soviet Union was regarded as a dependable supply.

The political and economic unity of the Soviet sphere of influence was strengthened by the unification of energy supplies inside the Eastern Bloc.Future Soviet energy export growth to Western Europe was made possible by the construction of pipelines and other infrastructure for exporting energy to Eastern Europe.The expanding energy needs of Western Europe in the 1970s, along with the economic downturns brought on by the 1973 and 1979 oil crises,provided an opportunity for the Soviet Union to increase its influence through the export of energy.

In the 1960s and 1970s,the first significant pipelines from the Soviet Union to Western Europe were built; the most famous of these was the "Brotherhood" pipeline, which provided gas to nations like Austria,Germany and Italy.Despite objections from the United States,Western European technology and capital were used to fund and build these pipelines as a means for West European nations to diversify their energy supplies and lessen their reliance on Middle Eastern oil.

Beginning with the expansion of Soviet gas supplies to Western Europe,a long-term energy partnership was established that resulted in a growing reliance on Soviet (and later Russian) gas by numerous Western European nations, most notably Germany.With the hope that economic interdependence would discourage Western measures that would be counter to Soviet goals,Soviet Union leveraged these exports to achieve political power over Western Europe.

Geopolitical Tensions and Energy Security Concerns (1980s)

Geopolitical tensions between the West and the Soviet Union increased in the 1980s,especially in the early years of the Reagan administration when Washington took a more assertive stand against Moscow.The United States considered the reliance of Western Europe on Soviet energy sources to be a strategic weakness. Because of concerns that it would erode NATO's unity and give Moscow excessive influence over Western Europe,Washington was against West European involvement in Soviet pipeline projects.They pursued energy agreements with the Soviet Union in spite of pressure from the United States, putting economic gain ahead of geopolitical considerations.Different interests within the Western alliance were brought to light by the transatlantic gap over energy policy, with the U.S. emphasizing security concerns and West Europe focused on economic pragmatism.During this time,Soviet energy exports to Western Europe continued to grow,establishing long-term relationships that would last long beyond the Cold War.Soviet natural gas was first used by Western European nations,especially West Germany.A network of gas pipelines connecting Soviet gas fields to markets in Western Europe was built throughout the 1970s.The most well-known of these was the Urengoy-Pomary-Uzhgorod pipeline,which began operating in 1984 and used Ukraine to transport gas from Siberia to West Europe.There were various reasons why Western West Europe found these energy imports from the Soviet Union appealing.
1.Economic Efficiency:Russian gas was reasonably priced and offered a dependable energy source for West Europe's expanding industrial base.
2. Energy Security: Diversification of energy supplies was deemed essential by West Europe,particularly after the oil crisis of the 1970s revealed the weaknesses of relying too heavily on Middle Eastern oil.
3.Political Considerations:Engaging in energy trade with the Soviet Union was perceived by several West European nations as a means of promoting détente and mitigating Cold War tensions.

Oil was important but natural gas was the main energy resource that Soviet Union exported to West Europe.One of the biggest producers of oil in the world, the Soviet Union began shipping significant amounts of its product to Western Europe in the 1970s.The Soviet economy depended heavily on the money from these exports, especially when oil prices were low.Because oil had a more flexible supply chain and was an internationally traded commodity,oil trade was less politically sensitive than the gas trade,but it nonetheless made West Europe more dependent on the Soviet Union for its energy needs.Given the more flexibility in acquiring oil,this reliance on Soviet oil was considered less hazardous than that of gas.

Soyuz Gas Pipelines:

The Soyuz pipeline is a significant natural gas pipeline system that transports natural gas from Russia to West Europe.With a primary focus on Central and Eastern European nations,the pipeline connects Orenburg, Russia,with West Europe via Ukraine.Constructed throughout the 1970s,this pipelines provided natural gas transportation services to several West European nations such as Austria,Germany and Italy.After joining other pipelines in Slovakia,the pipeline continues to carry gas to other locations around Europe.An estimated 26 billion cubic meters (bcm) of natural gas can pass through the Soyuz pipeline per year.Depending on the state of operation and the maintenance being done,this number may differ slightly.The Soyuz pipeline is a segment of a larger pipeline network that links West European consumers with Russian gas reserves.It is essential to the flow of Russian natural gas to West Europe,particularly prior to the opening of alternate routes such as Nord Stream. Geopolitical concerns have affected the pipeline, especially those pertaining to Ukraine,the country through which it passes.The stability of gas supply via this route has sometimes been jeopardized by disputes between Russia and Ukraine.

The Soyuz pipeline's strategic significance has slightly decreased with the installation of new pipelines like Nord Stream and TurkStream.It still plays a vital role in the West European gas supply chain,nonetheless particularly for the nations of Central and Eastern Europe.

Political actions, market demand and the expansion of alternative energy infrastructure in West Europe all have an impact on the pipeline's capacity and utilization.

Post-Cold War Energy Policy and Market Liberalization (1990s-2000s):

The end of the Cold War and the disintegration of the Soviet Union in 1991 brought about profound geopolitical changes in Central Asia and Eastern Europe.Eastern Europe and several regions of Western Europe received a significant amount of their energy from the Soviet Union,mostly from natural gas.

After the Soviet Union fell apart,its energy resources were divided up,with major parts of the former Soviet energy infrastructure being inherited by recently independent nations including Russia,Ukraine and the Central Asian republics.With its enormous natural gas and oil reserves, Russia in particular has become a significant energy supplier.

West Europe's reliance on Russian energy exports grew, particularly in Eastern Europe.Concerns regarding political clout and energy security arose as a result of Russia using this reliance to bolster its power in the area.

Energy transit routes became more complicated as a result of the disintegration, especially those that passed through Ukraine which developed become a vital transit nation for Russian gas deliveries to West Europe.Gas pricing and transit costs were the source of ongoing supply disruptions caused by disputes between Russia and Ukraine,underscoring the weaknesses in West Europe's energy security.

Energy Market Liberalization and Energy Charter Treaty

As a result of the larger West European integration process,the energy markets in West Europe began to integrate more and more in the late 20th century.Important agreements like the Lisbon Treaty (2007) and the Maastricht Treaty (1992) included clauses pertaining to the establishment of a unified West European energy market.In the energy industry,the emphasis turned to liberalization, competition and dismantling national monopolies.During this time,European Union directives and white papers offer thorough explanations of the actions made and difficulties faced in establishing a single energy market.

In the 1990s,European Union started liberalizing its energy markets in an effort to increase competition and lessen dependency on a few main suppliers.Adopted in the late 1990s and early 2000s,the EU's initial directives on gas and electricity sought to establish a unified energy market by allowing competition and separating the ownership of infrastructure from energy production and supply.

In order to safeguard energy investments and advance energy cooperation,the Energy Charter Treaty was created in 1994.It offered a framework for commerce in energy,investment protection, and the settlement of disputes between its member states, many of which were in West Europe.In order to diversify their energy sources and lessen their reliance on a single source,West European nations made investments in new energy infrastructure.Notable initiatives included the building of the Nord Stream pipeline, which provided Germany with direct access to Russian natural gas and the expansion of LNG facilities to enable imports from other areas.

A transition towards sustainability and the inclusion of environmental issues in energy policy also started in the 1990s.Energy security and environmental protection must be balanced as demonstrated by the 1997 approval of the Kyoto Protocol and later EU energy and climate packages. In light of the expanding significance of renewable energy sources,scholarly writing from this age examines the conflict between energy security,economic competitiveness and environmental sustainability.

EU Integration and Energy Policy (2000s-2010s):

The vast energy resources and infrastructure of the former Soviet Union were passed down to Russia following its disintegration in 1991.Russia became an important energy supplier to West Europe after becoming the largest successor state.Around this time,West European nations started to depend more and more on Russian oil and natural gas imports. Concerns over reliance on Russian energy were raised again in the early 21st century,especially in the aftermath of the gas disputes between Russia and Ukraine between 2006 and 2009.These incidents

brought to light the geopolitical dangers of relying solely on one natural gas supplier. The European Energy Security Strategy (2014) and other EU documents,as well as scholarly works from this era,examine the ramifications of these conflicts and the measures taken by the EU to diversify its energy supplies.

Nord Stream and New Pipelines

West Europe's reliance on Russian energy was further cemented in the 2000s with the completion of significant pipeline projects.One important project that moved natural gas straight from Russia to Germany without going via conventional transit nations like Ukraine was the Nord Stream pipeline,which started operating in 2011.Russia's energy supply to West Europe became more significant and more volumetric during this time.It connects Greifswald,Germany with Vyborg, Russia.The annual gas production capacity is approximately 55 billion cubic meters (bcm). A consortium headed by the massive Russian energy company Gazprom and including partners from Germany,Netherlands,France,operates the pipeline under the name Nord Stream AG.The construction of Nord Stream 2 was completed in 2021.It follows a similar route to Nord Stream 1 and has the same capacity of 55 bcm per year.Geopolitical considerations have made Nord Stream 2 extremely contentious. Critics claim that it lessens Ukraine's transit role,worsens energy security and increases West Europe's reliance on Russian gas (Ostrowski, 2022).

The key topic of discussion in relation to West European energy security is pipelines.They offer a consistent supply of natural gas, but given the political tensions between Russia and West,they also raise questions about an excessive reliance on Russia.

Unidentified explosions in September 2022 caused damage to portions of the Nord Stream 1 and 2 pipelines. This incident intensified much further.

Energy Security Concerns:

In particular,during the gas issues between Russia and Ukraine in 2006 and 2009,West Europe's reliance on Russian gas became a major source of anxiety.These disagreements brought attention to the dangers of relying solely on one supplier and the geopolitical unrest in transit nations, which resulted in temporary gas supply cuts to West Europe. The Lisbon Treaty and later agreements set forth the EU's energy policy,which centered on building a more robust and integrated energy market.Enhancing energy security,cutting greenhouse gas emissions and raising the proportion of renewable energy were among the main goals (Austvik, 2016).With the goals of promoting sustainable energy, integrating energy markets and improving energy security,Energy Union was established.By diversifying energy sources, enhancing energy infrastructure and fostering greater member state cooperation, it sought to lessen West Europe's reliance on outside suppliers.The establishment of an internal energy market, investments in infrastructure initiatives like the Southern Gas Corridor and the encouragement of regional cooperation on energy-related issues are just a few of the measures the EU introduced to improve energy security.

Recent Developments and the Green Transition (2010s-Present)

West Europe was supposed to be carbon neutral by 2050 when the West European Green Deal was introduced in 2015 (John, 2013).The agreement placed a strong emphasis on the necessity of moving away from fossil fuels,using more renewable energy sources and improving energy efficiency.Important projects included investments in energy storage and smart grids, as well as the development of wind,solar and hydrogen energy.

In reaction to geopolitical concerns, particularly the Russia-Ukraine crisis,West European countries have escalated attempts to diversify their energy supplies.This involves expanding imports of LNG from other regions, investing in alternative energy suppliers and strengthening energy infrastructure to boost resilience.

EU Sanctions and Policy Adjustments:

The EU has put restrictions on Russian energy exports in retaliation to the 2022 invasion of Ukraine.Because of these sanctions,there has been a reassessment of energy dependency as well as a greater emphasis on enhancing energy efficiency and

locating substitute suppliers.

To meet their energy needs,West European countries have traditionally used a variety of laws and techniques.The policies implemented have changed to adapt to changing conditions, starting from post-World War II reconstruction and diversifying energy sources in response to oil crises,to energy market liberalization and the construction of new infrastructure.A secure and sustainable energy future in West Europe is dependent on continuous adaptation of energy policy,as seen by recent developments such as the European Green Deal and initiatives to diversify energy supply in light of geopolitical concerns (Checchi, 2009).

Challenges to West Europe Energy Security after Ukraine War

The Russia-Ukraine conflict has significantly impacted energy security in West Europe, exacerbating existing vulnerabilities and introducing new challenge.After the invasion of Ukraine, Russia,which had previously been one of West Europe's main suppliers of natural gas, drastically stopped supplying gas to numerous West European nations.Across the continent, energy shortages and price increases are the result of this supply reduction.The safety and security of the energy infrastructure have come under scrutiny due to the conflict.The vulnerability of vital energy infrastructure to geopolitical tensions and conflict-related damage was demonstrated, for example,by the September 2022 sabotage of the Nord Stream pipelines.In order to maintain the resilience of energy networks,damaged infrastructure not only interrupts the flow of energy but also necessitates expensive repairs and long term expenditures.

Geopolitical Tensions and Sanctions

While sanctions are a tool for political pressure,European Union has sanctioned Russian energy exports including gas and oil,in retaliation for the invasion.By imposing these sanctions,West Europe hopes to lessen its dependency on Russian energy and put pressure on Russia to stop acting aggressively.

Beyond just energy,there is geopolitical tension between West Europe and Russia.The conflict has an impact on larger political and economic ties,making diplomacy more difficult and possibly affecting international energy cooperation.More difficulties in organizing coordinated responses to the energy crisis and fragmented approaches to energy security may result from the wider political implications. Increased inflationary pressures are a result of high energy costs and they have the potential to impede economic expansion and compromise financial stability in general. In addition,they present difficulties for vulnerable groups and energy-intensive businesses.

West Europe has stepped up efforts to build infrastructure for liquefied natural gas (LNG) imports in response to the decreased supply of Russian natural gas.However,it requires time and a large financial commitment to increase LNG infrastructure and capacity.Global supply chains,notably those involving technology and equipment for the energy sector have been impacted by the conflict.Supply chain disruptions have the potential to raise project costs and cause delays in the development of energy infrastructure.Decisions about energy policy can be influenced by political and public pressure, which could result in reactive rather than proactive actions.It takes careful balance to attend to pressing issues while keeping strategic energy goals front and center.Low-income households and vulnerable communities are disproportionately impacted by rising energy prices and supply disruptions.A major difficulty for policymakers is ensuring fair access to energy while minimizing the effects on those who will be most impacted.

West Europe's energy security is facing serious challenges as a result of the Russia-Ukraine conflict,including supply chain and infrastructural problems,market volatility,geopolitical tensions,disruptions in energy supplies and difficulties with the energy transition.A multifaceted strategy is needed to address these issues,including guaranteeing fair access to energy,investing in infrastructure,diversifying energy sources and expediting the switch to renewable energy.The disagreement emphasizes how energy policy must be resilient and flexible in order to handle both short-term setbacks and long-term strategic objectives.

The sanctions imposed on Moscow have disrupted West Europe's dependence on Russian gas supply.Regardless of who supplies it,continent will always be financially and energy-vulnerably dependent due to the lack of viable alternatives. The start of the conflict between Russia and Ukraine in 2022 made clear how crucial energy security is to maintaining Moscow's geopolitical dominance in West Europe.As it looked for other suppliers,the continent which in 2021 imported over 46% of its gas needs from Russia—found itself in a precarious situation.

As a result,US had the chance to overtake Russia and take over as West Europe's main supplier of natural gas at much higher rates,making substantial profits at the expense of its allies in West Europe.France-based Kpler,a data and analytics company claims that in 2022 the Liquefied natural gas (LNG) imports into the EU were 140 billion cubic meters (BCM),up 55 BCM from the year before.Approximately 57.4 billion dollars (41 percent) of this total currently originates from the United States,representing a 31.8 billion increase; 29 billion dollars from Africa (20.7 percent),primarily from Egypt,Nigeria,Algeria and Angola; 22.3 billion dollars from Russia (16 percent); 19.8 billion dollars from Qatar (14 percent); 4.1 billion dollars from Latin America (2.92 percent),primarily from Trinidad and Tobago and 3.37 billion dollars from Norway (2.4 percent).

With 26.23 percent of all LNG imports in West Europe in 2022, France was the top importer. Belgium (10.42 percent),Spain (22.3 percent),Netherlands (12.65 percent) and Italy (11 percent) were among the other major imports.These nations,along with Greece (2.9 percent),Lithuania (2.31 percent) and Poland (4.7 percent),imported more than 90% of the LNG sent to West Europe at costs more than those of Russian pipeline gas.It is important to remember that LNG is transported to nations lacking such infrastructure,like Germany after being converted back to gas at receiving stations in Europe.

Last year,West Europe managed to cut its reliance on Russian pipeline gas from 46 percent to 10 percent.The economy, however,paid a heavy price for this decline,as gas prices increased to $70 per million British thermal units (Btu) from $27 prior to the conflict in Ukraine.By year's end, the price dropped to $36, down from $7.03 in the US. French President criticized what he dubbed "American double standards" by stating that "American gas is 3–4 times cheaper on the domestic market than the price at which they offer it to West Europeans."Due to high gas prices,countries that either export gas or have gas but lack infrastructure,like Egypt,Qatar,Turkey,UAE,Iran,Libya,Algeria and those bordering the Mediterranean basin are becoming more interested in exporting gas to West Europe.

West European nations are being compelled to look for the more costly LNG in order to replace the less expensive Russian pipeline gas.By the end of 2023, the EU and Britain hope to have increased LNG import capacity by 5.3 billion cubic feet (BCF) per day; by 2024,that capacity is expected to have increased by 34%, or 6.8 BCF per day (Rosicki, 2023).

The only Persian Gulf emirate to boost gas shipments to West Europe in 2022 is Qatar.This is mainly because Asian markets where lower shipping costs and longer contracts allow for bigger earnings are what the Persian Gulf countries prefer to export their gas.Qatar sold a portion of its exports on the West European spot market last year capitalizing on the sharp rise in gas prices. Ten to fifteen percent of Qatar’s production can be redirected to this market,says the country’s energy minister. The International Energy Agency (IEA),located in Paris,projects that this year's worldwide demand for natural gas will rise to 394 BCM,partly due to West Europe's desire to diversify its gas supplies outside Russia. Furthermore,West Asia continues to be a crucial area for West Europe to access for this reason because of its substantial reserves.West Europe will continue to pay a hefty price for energy security if this isn't done, and it won't become truly independent. Alternatively,West Europe could come to rely on US LNG.This maintains West Europe weak, submissive and reliant on US energy supplies but grants it near total freedom from Russian gas.

Concluding Remarks

The progress of the economy and the standard of living depend heavily on energy.While the world economy expands,so does the need for energy

globally,the world's supply of energy is limited and becoming progressively depleted from fossil fuels.The task of securing energy supply has grown more difficult and governments increasingly place a high premium on energy security.Future energy consumption is predicted to rise steadily,creating a conflict between energy security and insecurity.

One of the Community's energy goals was to promote RE,according to a Council resolution from 1986.The primary goals of increased competitiveness,supply security and environmental protection were outlined in the 1995 White Paper and RE was acknowledged as a component in assisting in the achievement of these goals.

The West European Commission unveiled "Fit for 55," a comprehensive set of legislative and policy recommendations in July 2021.The package is an essential component of the European Union's (EU) larger plan,which is stated in the European Green Deal,to attain carbon neutrality by 2050."Fit for 55" is the term used to describe the EU's goal of lowering greenhouse gas emissions from 1990 levels by at least 55% by 2030.

As we had mentioned that West Europe has been heavily dependent on other countries for Energy.In the past decades over Middle East and in the 21st century over Russia.This poses serious thtreat to their Energy insecurity from time to time de to geopolitical tensions that has been tken place in the last two decades.West Europe is taking Energy from other suppliers like Qatar and United States on high cost due to sanctions on Russia since 2022.In the long term,they had changed their strategy from Renewable to Non-Renewable Energy by Installing Wind and Solar panels to get self-sufficient in their energy needs.

To meet their energy needs,West European countries have traditionally used a variety of laws and techniques.The policies implemented have changed to adapt to changing conditions,starting from post-World War II reconstruction and diversifying energy sources in response to oil crises,to energy market liberalization and the construction of new infrastructure.A secure and sustainable energy future in West Europe is dependent on continuous adaptation of energy policy,as seen by recent developments such as the West European Green Deal and initiatives to diversify energy supply in light of geopolitical concerns.

Recommendations:

1. A cohesive,integrated approach is critical to achieving energy security.
2. In order to guarantee mutual assistance in the event of an energy crisis, such as gas shortages, EU countries must cooperate.Cooperation in infrastructure,legislation and energy sourcing is the goal of the EU's Energy Union.
3. West Europe should invest more in nuclear energy and renewable energy sources (wind,solar and biomass) in place of natural gas since they provide more reliable and sustainable energy supplies.
4. West Europe ought to purchase electricity from more nations.It would be beneficial to increase the recent endeavors to import LNG from the United States,Qatar and Norway.
5. Through partnerships with areas such as North Africa,West Europe might investigate new gas pipelines and import sustainable energy sources,such as solar energy from the Sahara Desert.
6. West Europe's reliance on imported fossil fuels can be considerably decreased by making investments in wind,solar and hydropower infrastructure.Renewable energy will be a key component of the European Green Deal's transition to climate neutrality by 2050.
7. Connectivity between West European nations and alternative gas suppliers can be improved by projects like the Trans Adriatic Pipeline (TAP) and Baltic Pipe.
8. Domestic manufacturing choices that make use of "taboo" sources
   In addition to other policy alternatives,the EU must boost its domestic energy output to lessen its reliance on imports.

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