



NEW ENERGY ORDER

1. A brief glossary of the new energy order

ACTORS OF THE NEW ENERGY ORDER

The new energy order is being shaped by various actors who play key roles in the transformation of energy systems. These actors include:

Governments and regulators: Government institutions set laws, policies and regulations that shape energy and markets. These regulations affect how energy is produced, distributed and consumed.

Private companies: Energy companies, especially in the renewable energy sector (solar power, wind power plants, etc.), play a key role in innovation and investment in new technologies.

Technology companies: Companies engaged in the development of technology such as energy storage systems and digital energy management platforms provide new tools for more efficient use of energy resources.

NGOs and environmental organizations: These organizations play an important role in advocating for sustainable practices, educating the public and pressuring governments to commit to climate goals and reduce emissions.

Academic community: Researchers and universities contribute to the development of new technologies, data analysis and understanding of the impact of energy policies on society and the environment.

Citizens and consumers: Consumers have increasing power through the choice of renewable energy sources, access to smart devices and membership in energy associations, which directly influence demand and energy trends.

International organizations: Organizations such as the UN, IEA (International Energy Agency) and other international bodies play an important role in setting global goals and standards for energy sustainability.

Together, these actors contribute to the development of a new energy order based on sustainability, reduced emissions and greater energy efficiency.

ENERGY COMPANIES IN THE NEW ENERGY ORDER

The new energy order, characterized by the transition to renewable energy sources, decentralization of production and digitalization, brings fundamental changes in the way energy companies operate. Traditional business models, focused on the production and distribution of fossil fuels, are no longer sustainable. Companies that want to survive in the market must adapt to new circumstances and adopt innovative business models.

FACTORS OF THE NEW ENERGY ORDER

The new energy order refers to the transformation of the global energy system towards more sustainable, efficient and less polluting energy sources. These factors include several key aspects:

Renewable energy sources: Solar, wind, hydro, and geothermal energy are becoming increasingly important as alternative energy sources that reduce dependence on fossil fuels.

Technological advances: Innovations in technology, such as advances in battery technologies, smart grids and energy efficiency play a key role in shaping the new energy order.

Policy and regulation: States and international organizations create policies that encourage the use of clean energy sources, reduce CO2 emissions and set goals to reduce dependence on fossil fuels.

Environmental Awareness: Increased awareness of climate change and environmental issues has led to a greater demand for sustainable solutions, influencing consumer and industry behavior.

Circular economy: The promotion of a model that minimizes waste, recycles resources and extends the life of products becomes a central point in the new energy order.

Decentralization: The development of local energy sources, such as rooftop solar panels or small wind turbines, reduces the need for centralized energy systems and increases the resilience of communities.

Transportation: The electrification of transportation, including the development of electric vehicles (EVs) and infrastructure, plays a significant role in reducing emissions and transitioning to more sustainable energy sources.

Increasing investments in sustainable projects, green bonds and ESG (environmental, social, and governance) criteria are becoming essential in financing projects that focus on renewable energy sources.

These factors, in combination, shape the transformation of the global energy system and contribute to the emergence of a new energy order that tends to reduce the negative impact on the environment and achieve energy security.

ENERGY MARKET IN THE NEW ENERGY ORDER

The new energy order, driven by climate change, geopolitical turmoil and technological advances, is bringing fundamental changes to the global energy market. This shift is characterized by the transition from fossil fuels to renewable energy sources, the decentralization of energy production, digitalization and the increasing role of consumers.

THE EUROPEAN UNION IN THE NEW ENERGY ORDER

The European Union is facing a profound transformation of its energy system. Geopolitical disruptions, climate change and a growing awareness of the need for sustainable development are driving this transformation. The new energy order brings both challenges and numerous opportunities for the EU.

GENESIS OF NEW ENERGY

THE NEW ENERGY ORDER

The genesis of the new energy order can be traced through the historical development of energy systems, changes in technology, economic dynamics and social demands.

THE GEOPOLITICAL DIMENSION OF THE NEW ENERGY ORDER

The new energy order, driven by climate change, growing awareness of sustainability and geopolitical turmoil, is profoundly transforming international relations. Energy has always been a key factor in shaping geopolitics, and this new era brings even more complex and dynamic relations between states.

CROATIA IN THE NEW ENERGY ORDER

Croatia, like the rest of the world, is facing major changes in the energy sector. The transition to renewable energy sources, the decarbonization of the economy and the growing awareness of climate change pose new challenges, but also open up numerous opportunities for development.(...). Croatia, as a member of the European Union, is actively participating in the transformation of the energy system that is taking place at the level of the entire continent. The new energy order, driven by climate changes, geopolitical changes and increasing awareness of the need for sustainable development, brings numerous challenges, but also significant opportunities for our country

WHEN DID THE TERM "NEW ENERGY ORDER" COME ABOUT?

The term "new energy order" arose in the context of global changes in energy policy and economics, and in particular began to be used from the late 1970s and early 1980s, after the global energy crisis that was caused by the OPEC oil embargo in 1973 and repeated crises in 1979. Due to these events, many countries began to reconsider their energy strategies and reliance on fossil fuels.

"New energy order" often refers to the transition to more sustainable energy sources, the diversification of energy sources and the inclusion of ecological aspects in energy policy. This term also includes reflection on global power relations in the energy sector, as well as on the security of energy supply.

WHAT IS THE RELATIONSHIP BETWEEN THE "NEW ENERGY ORDER" AND THE GLOBAL POWER ORDER?

The relationship between the "new energy order" and the global power order is complex and multi-layered. As energy systems transform towards sustainability and renewables, significant changes are occurring in global geopolitical dynamics.

WHAT ARE THE GOALS OF THE NEW ENERGY ORDER?

The goals of the new energy order are focused on transforming the global energy system to address contemporary environmental, economic and social challenges.

WHAT ARE THE TRENDS IN THE NEW ENERGY ORDER?

The new energy order is witnessing a number of trends that are shaping the future of the energy industry, policy and consumption.

Here are some of the key trends:

Increased use of renewable energy sources

Decentralization of energy systems

Increasing energy efficiency

Energy storage

Smart energy and digitalization

Green hydrogen

Sustainability and the circular economy.

Together, these trends are shaping a new energy order, where sustainability, efficiency and innovation are considered fundamental principles for the future development of energy systems and policies. The energy transition will require integrated approaches and cooperation between all stakeholders, from governments and industry to consumers.

MARKERS OF THE NEW ENERGY ORDER

Markers of the new energy order encompass changes in the global energy system that are occurring due to various factors, including technological advances, climate change, geopolitical pressures and environmental demands.

NEW ENERGY ORDER

The new energy order is a term that is increasingly appearing in global discussions on energy and geopolitics. It describes the profound changes that are occurring in the way energy is produced, distributed and consumed, and how these changes affect international relations and economies.

Key characteristics of the new energy order:

Transition to renewable energy sources: Solar, wind and hydropower are increasingly replacing fossil fuels.

Decarbonization of the economy: Reduction of greenhouse gas emissions to mitigate climate change.

Digitization of the energy sector: Smart grids, IoT devices and artificial intelligence optimize energy production and consumption.

Geopolitical changes: Changes in the relationship between energy producing and consuming countries.

Energy independence: States strive to reduce dependence on energy imports.

Why is the new energy order important?

Climate change: Switching to renewable energy sources is key to combating climate change.

Energy security: Reduces dependence on unstable energy sources and reduces the risk of energy crises.

Economic development: Creates new jobs and encourages innovation.

Geopolitical stability: Reduces tensions between countries over access to energy resources.

What are the main challenges?

High investments: Switching to renewable sources requires large investments.

Technological development: It is necessary to continuously develop new technologies.

Changing consumer habits: It is necessary to educate the public about the importance of energy efficiency.

Geopolitical instability: Changes in the energy order may lead to new tensions.

China as a key player

According to the latest reports, China is positioning itself as a leading force in the development of renewable energy sources. Given its ambitious goals and large investments, China could significantly influence the shaping of the new energy order.

NEW ENERGY ORDER AND ENERGY POLICY

The new energy order and energy policy are interrelated concepts that relate to the transformation of the global energy system, with an emphasis on sustainability, emission reduction and security of supply.

NEW ENERGY ORDER AND ENERGY GEOPOLITICS

The new energy order and energy geopolitics are interrelated concepts that relate to the transport patterns in the global energy system and their impact on international relations, security and the economy.(...). Geopolitics of Energy

Dependence on Fossil Fuels: Traditional energy geopolitics focuses on managing global reserves and transportation routes of fossil fuels, such as oil and natural gas. Countries rich in these resources have a strategic advantage.

Climate change and policy: Global pressure to reduce greenhouse gas emissions and adopt sustainable practices is reducing the dynamics among countries, as energy policy is increasingly aligned with climate goals.

New energy players: With the rise of renewable energy, new players, including smaller countries, local communities, and private companies, are gaining importance in the global energy pressure.

Energy security: Countries must balance energy supply and demand in the face of political instability, war, and economic sanctions that can affect energy availability.

Transition and conflict: The shift to renewables could lead to conflict over resources such as lithium and cobalt, which are key to batteries and other clean energy technologies. Countries rich in these minerals could become geopolitical players.

The new energy order and the use of artificial intelligence in energy companies

The convergence of the new energy order with advances in artificial intelligence (AI) is revolutionizing the energy sector. As companies transition from conventional fossil fuel-based operations to more sustainable and decentralized energy systems, artificial intelligence is emerging as a powerful tool to increase efficiency, optimize operations, and facilitate innovation.

HISTORY OF THE NEW ENERGY ORDER

The history of the new energy order is complex and spans decades of transformations in the way energy is produced, distributed, and used. Here is a chronological overview of key moments:

Early 20th century

Industrial Revolution: Energy production was largely dependent on coal and oil. These energy sources helped drive rapid industrial development and urbanization.

Electrification: The discovery and spread of electricity led to increased electricity consumption, which became a key source of energy for industry and households.

Mid-20th century

Post-war expansion: The growing demand for energy was driven by rapid economic growth, particularly in countries such as the United States and Western Europe.

Fossil fuels: Coal, oil, and natural gas became the dominant energy sources, and energy from these sources shaped the global economy.

1970s

Oil crisis: The aftermath of the 1973 oil crisis drew attention to the vulnerability of countries dependent on oil imports, which prompted research into alternative energy sources.

First renewable energy programs: The first programs for research and development of renewable energy sources, such as solar and wind power, began to develop.

1980s and 1990s

Green energy: Increasing interest in ecology and sustainability led to the establishment of regulations and incentives for the use of renewable energy sources.

Climate change: The 1992 Rio de Janeiro Conference (UNCED) marked the beginning of a global dialogue on climate change.

Early 21st century

Kyoto Protocol (1997): This international treaty set binding targets for reducing greenhouse gas emissions in developed countries.

Technological progress: Rapid advances in renewable energy technologies, including the reduction in the cost of solar panels and wind turbines.

2010s

Green initiatives: Increased investment in renewables, electric vehicles, and smart grids. Many countries have begun to introduce targets for reducing emissions and transitioning to a "green" economy.

Paris Agreement (2015): Establishing a global framework to combat climate change with the goal of limiting global warming to below 2 °C.

Today

Decentralization and digitalization: Increased use of microgrids, rooftop solar panels, and smart technologies. These changes allow consumers to become active participants in the energy landscape.

Sustainable development: Commitments by communities and individuals to the Sustainable Development Goals (SDGs) and to combating climate change are becoming central to new energy policies and strategies at the global level.

Research into new technologies: Research into new and innovative technologies such as battery technologies, hydrogen and new-age nuclear energy continues.

The history of the new energy order reflects the evolution in understanding the need for sustainable energy and the challenges of climate change. The transition to a more sustainable energy system is underway, with the aim of reducing dependence on fossil fuels and shifting to clean, renewable sources.

WHAT'S NEW IN THE NEW ENERGY ORDER

The "new energy order" refers to changes and adjustments in the global energy system that are the result of the development of new technologies, changes in policies, and the interplay of economic and environmental factors.

The structure of the new energy order

The structure of the "new energy order" can be understood through several key components:

Geopolitical implications: Energy, especially oil and natural gas, plays a key role in shaping the strategies of states. Control of key energy resources and routes can decide global hegemony.

Restore energy independence: States (such as the United States) seek to reduce dependence on foreign energy sources, which leads to a change in the global energy market.

Technological innovations: The development of renewable energy sources (such as solar and wind power) reduces the dynamics of energy demand and supply, as well as geopolitical relations.

Impact of climate change: With growing awareness of climate change, countries are faced with the need to reshape their energy policies to align with global goals to reduce carbon dioxide emissions.

TECHNOTRONIC SOCIETY AND THE NEW ENERGY ORDER

The concept of technotronic society, often associated with a high level of automation, digitization and integration of technology in all aspects of life, is gaining more and more importance in the context of the new energy order. This synergy brings numerous changes, challenges and opportunities, both for society as a whole and for individuals(...)
Definition: This term, coined by Zbigniew Brzezinski in his book "Between Two Ages" from 1970, describes a society that relies heavily on advanced technology

FUNDAMENTAL DOCUMENTS OF THE NEW ENERGY ORDER

The transition to a new energy order includes a series of fundamental documents that guide policies, regulations and obligations at different levels — national, regional and international. These documents reflect the growing recognition of the need for sustainable energy practices, climate action and the development of renewable energy sources.

Example

Paris Agreement (2015): The basic framework within the United Nations Framework Convention on Climate Change (UNFCCC), the Paris Agreement aims to limit global warming to well below 2 degrees Celsius above pre-industrial levels, with efforts to keep it below 1.5 degrees. It sets binding commitments for countries to reduce greenhouse gas emissions and improve climate resilience.

WHO FIRST USED THE TERM "NEW ENERGY ORDER"

The term "new energy order" was first used by members of OPEC (Organization of the Petroleum Exporting Countries) during the 1970s, particularly in the context of the energy crisis that began in 1973. The term referred to changes in the global energy system, highlighting the need to restructure the relationship between energy producers and consumers, which was particularly relevant after the dramatic increases in oil prices.

One of the key politicians who used this term was Iranian President Mahmoud Ahmadinejad in the early 2000s, but the term also appears frequently in various academic and political discourses on energy and international relations. In this sense, there is no single author who could be considered the "first" to use it, as it developed through various contacts and dialogues

Brzezinski, an American political analyst and national security advisor (1977-1981) under President Jimmy Carter, used the term "new energy order" as part of a broader reflection on the function of energy in international relations and geopolitics. In the context of the 1970s, especially after the energy crisis, Brzezinski pointed to changes in global energy, the rise of OPEC and the dependence of Western countries on oil.

THE ROLE OF ARTIFICIAL INTELLIGENCE IN THE NEW WORLD ORDER

Artificial intelligence (AI) is increasingly penetrating various industries, and the energy sector is no exception. In the context of the new energy order, where the emphasis is placed on renewable energy sources, energy efficiency and digitization, AI plays a key role in optimization, automation and making smarter decisions.

Key applications of artificial intelligence in the energy sector:

Energy consumption forecasting: AI algorithms can analyze large amounts of energy consumption data to predict future needs. This enables energy companies to optimize energy production and distribution, reducing losses and increasing efficiency.

Work optimization Power plants: AI can optimize the operation of power plants, including thermal and renewable power plants, to increase their efficiency and reduce emissions.

Smart grid management: AI is essential for managing complex smart grids that integrate large amounts of renewable energy sources and enable two-way communication between producers and consumers.

Maintenance and repair: AI can be used to predict failures in energy equipment, which allows for maintenance planning and reduces the risk of sudden supply disruptions.

New materials development: AI is being used in the development of new materials for the production of solar panels, batteries and other components for energy production and storage.

Discovering new fossil fuel deposits: Although the focus is increasingly shifting to renewable sources, AI is still being used to discover new fossil fuel deposits, to ensure energy security in the transition period.

WHY DO WE NEED A NEW ENERGY ORDER?

A new energy order is needed for several key reasons related to changes in the global environment, economic, environmental and geopolitical challenges.

Note:

This document was created for the needs of the 9th Interenf. It consists of terms and questions addressed to artificial intelligence as a component of the new energy order.

When compiling the document, we used the following systems: GPT Chat – DeepAI, Free ChatGPT, Gemini - chat to supercharge your ideas – Google. Access to these addresses was achieved on December 28, 2024, and January 2 and 3, 2025.

The search result is this customized document, the aim of which is to familiarize the general public with the structure and components of the new energy order.

Prepared by:

Anđelko Milardović

Zagreb, January 3, 2025.

2. Geopolitics and the new energy order

Overview

Geopolitics and the new energy order. Overview of key changes

Geopolitics and the energy order have always been closely linked. Energy resources have historically been the initiator of wars, the creator of allies, and the shaper of the global economy. In the past few decades, a number of factors have led to significant changes in the energy sector, which in turn have had profound consequences for geopolitics.

Key drivers of change

- Transition to renewable energy sources: Growing awareness of climate change and technological advances have led to the increasing use of solar, wind and other renewable energy sources. This is changing traditional energy routes and reducing dependence on fossil fuels.
- Geopolitical tensions: Conflicts and instability in traditional energy regions, such as the Middle East and Russia, have disrupted global energy flows and fueled the search for alternative sources.
- New players on the world stage: Countries such as China and India, with large energy consumption, are increasingly influencing the global energy market. Their policies and investments in the energy sector are shaping the new world order.
- Digitalization and smart grids: The development of digital technologies and smart grids enables more efficient production, distribution and consumption of energy, which also affects geopolitical relations.

Implications for geopolitics

- Shifting balance of power: Countries rich in renewable energy sources, such as some African countries, may gain greater geopolitical importance. On the other hand, dependence on fossil fuel imports can make some countries more vulnerable to geopolitical shocks.
- New alliances: Countries with common energy interests can create new alliances, changing the existing bloc structure.
- Competition for resources: The struggle for control over critical minerals and other resources needed to produce renewable energy may become a new focus of geopolitical tensions.
- Security of energy infrastructures: Protecting energy networks from cyber attacks and physical damage is becoming increasingly important for national security.

What does this mean for the future?

The future energy order will be more complex and dynamic than ever before. Key challenges include:

- Reconciliation of energy and climate goals: States will have to find a way to balance the need for energy security and the reduction of greenhouse gas emissions.
- Ensuring a just transition: Fossil fuel-dependent countries will need to adapt to the new circumstances, and developed countries will need to provide support in this process.
- Global cooperation: Addressing global energy challenges requires international cooperation and coordination.

Source: Gemini -Google: <https://gemini.google.com/app/ebdc790e088b1aff>

Accessed January 2, 2025

2.1. Energy geopolitics

Energy geopolitics. The power that drives the world

Energy geopolitics is a complex discipline that studies the impact of energy on international relations, politics, and economics. Energy, as a fundamental resource for the development and functioning of modern societies, has become a key factor in shaping the global order.

Why is energy so important in geopolitics?

- Energy dependence: Got Power plants: AI can optimize the operation of power plants, including thermal and renewable power plants, to increase their efficiency and reduce emissions.

Smart grid management: AI is essential for managing complex smart grids that integrate large amounts of renewable energy sources and enable two-way communication between producers and consumers.

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- New players on the world stage: Countries such as China and India, with large energy consumption, are increasingly influencing the global energy market. Their policies and investments in the energy sector are shaping the new world order.
- Digitalization and smart grids: The development of digital technologies and smart grids enables more efficient production, distribution and consumption of energy, which also affects geopolitical relations.

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Source: Gemini -Google: <https://gemini.google.com/app/ebdc790e088b1aff>

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Why is energy so important in geopolitics?

- Energy dependence: All human activities use energy, from food production to transportation, etc.
- Unequal distribution of resources: Energy resources are not evenly distributed around the world, which makes some countries dependent on imports.
- Impact on the economy: Energy prices have a significant impact on inflation, growth rates, and the competitiveness of economies.
- Security: A stable energy supply is essential for national security.
- Geopolitical power: Countries with large energy reserves have greater geopolitical power and influence over international relations.

Key elements of energy geopolitics

- Energy resources: Oil, natural gas, coal, nuclear energy, renewable sources (solar, wind energy).

Opens in new window www.researchgate.net

- Transportation routes: Oil pipelines, gas pipelines, sea routes.

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- Geopolitical regions: Middle East, Russia, United States, China.

Opens in new window www.visualcapitalist.com

- International organizations: OPEC, International Energy Agency (IEA).

Contemporary challenges in energy geopolitics

- Energy transition: Shifting from fossil fuels to renewable energy sources.
- Climate change: Impact of climate change on energy production and consumption.
- Geopolitical tensions: Conflict and instability in energy-rich regions.
- Energy security: Ensuring a stable energy supply.

What does the future hold?

The future of energy geopolitics will be shaped by a number of factors, including technological advances, climate change, geopolitical shifts, and growing global energy demand. The energy transition is expected to continue, cooperation on energy security is expected to increase, and renewable energy sources are expected to become increasingly important.

Source: Gemini-Google: <https://gemini.google.com/app/d088cb58278236cf>

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2.2. The chessboard and the new energy order (I)

Following a famous metaphor

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The chessboard and the new energy order. A high-stakes geopolitical game

The chessboard metaphor is often used to describe complex geopolitical relationships. In the context of the new energy order, this metaphor becomes even more relevant. Changes in the global energy situation, such as the transition to renewable energy sources, the discovery of new fossil fuel deposits and geopolitical tensions, create a dynamic field on which high stakes are played.

How does chess reflect energy policy?

- Each figure - one player. Each country is like a piece on a chessboard, with its own unique characteristics, goals and limitations.
- Moves - political decisions. Every move the state makes on the energy market affects the positions of other players.
- Strategy - long-term planning. Establishing an energy strategy is like planning a long-term chess game.
- Uncertainty - risk factor. Uncertainty is an integral part of the game, just as uncertainty is the outcome of every chess game.

Key players on the energy chessboard

- Fossil fuel producers. Countries with large oil and gas reserves have significant power to influence global energy prices.
- Energy consumers. Large energy consumers, such as China and India, have an increasing influence on shaping the global energy market.
- Renewable energy producers. Countries investing in renewable energy are becoming increasingly important players.
- International organizations. Organizations such as OPEC and the International Energy Agency play the role of arbitrators and mediators.

Impact of new technologies

The development of new technologies, such as high-energy-density batteries and carbon capture and storage technologies, brings new opportunities and challenges. These technologies can change the rules of the game and create new winners and losers.

Geopolitical implications

The new energy order has profound geopolitical implications. The struggle for control of energy resources can lead to conflict, while energy cooperation can strengthen international relations.

Conclusion

The chessboard is a useful metaphor for understanding the complexity of the new energy order. However, it should be borne in mind that the reality is even more complex and that numerous other factors are at play, such as climate change, demographic trends and technological developments.

Source: Gemini-Google: <https://gemini.google.com/app/50c40bec17515b27>

Accessed 2 January 2025.

2.3. The Chessboard and the New Energy Order (II)

The metaphor of a chess game to describe energy is indeed interesting and offers numerous possibilities for deeper analysis.

Premise of the metaphor

- The chessboard as an energy system. Each square on the chessboard represents a different element of the energy system – from energy sources (oil pipelines, gas pipelines, solar panels) to consumers (households, industry).
- Pieces as energy sources and technologies. Each piece has its own role and value, just as different energy sources (oil, gas, renewable sources) and technologies (nuclear power plants, wind turbines) have different characteristics and potential.
- Moves as energetic decisions. Every move in chess is the result of deliberation and strategic planning, just as decisions about investing in new energy projects or changing energy policy are the result of complex analyzes and negotiations.

Extending the metaphor

1. Strategies and tactics

o Long-term strategy. Just as a chess player has a long-term strategy for controlling key squares on the board, energy companies and governments have long-term strategies for ensuring energy security and reducing dependence on fossil fuels.

o Short-term tactics. Responding flexibly to market changes or unexpected events (eg geopolitical crises) is similar to short-term tactics in chess, such as sacrificing one piece in order to achieve a larger gain.

2. Players and interests.

o Governments. As the most important players, governments make laws and regulations that affect the energy sector, much like the king in chess has the most power.

o Companies: Energy companies compete for market share and profits, much like different players on a chessboard compete for control of key squares.

o Citizens. As energy consumers, citizens have an increasing role in shaping the energy future, much like pawns in chess can become powerful pieces if managed well.

3. Uncertainty and risk

o Unexpected events. Like the unpredictable moves of opponents in chess, unexpected events such as natural disasters or geopolitical crises can have a major impact on the energy sector.

o Technological advances. The rapid development of new technologies, such as renewable energy and energy storage, introduces additional uncertainty into the energy game.

Examples of metaphor application

- Energy transition as a chess revolution. The shift from fossil fuels to renewable energy can be compared to a revolutionary new opening in chess that completely changes the rules of the game.
- Geopolitical conflicts as chess battles. Conflicts over energy resources, such as those in the Middle East, can be seen as battles for control of key fields on the global energy board.
- Investing in research and development as a long-term game. Investing in new technologies and energy solutions is similar to a long-term chess game, where rewards are realized only after a series of well-considered moves.

2.4. Croatia as the new EU “gas hub” in the context of the new (energy) geopolitics

In recent years, Croatia has increasingly gained importance as a potential new energy hub for the European Union. This status has been particularly highlighted after the Russian invasion of Ukraine and the resulting energy crisis that has shaken Europe.

Key factors positioning Croatia as a potential gas hub:

- **LNG terminal on Krk:** This terminal, which has been expanded and modernized, allows Croatia to receive large quantities of liquefied natural gas (LNG) from different parts of the world, thus reducing dependence on a single supplier.
- **Geographical location:** Croatia is strategically located at the crossroads of energy flows. This enables the distribution of gas not only on the Croatian market, but also to neighboring countries.
- **Connection to the European gas network:** Croatia is actively working on expanding and modernizing its gas infrastructure to better connect to the European network.
- **Diversification of supply:** The LNG terminal on Krk, together with plans to connect to other gas corridors, allows Croatia and the region to diversify their sources of gas supply, thus reducing dependence on a single supplier.

Geopolitical context and implications:

- **Reducing dependence on Russian gas:** One of the main goals of the EU is to reduce dependence on Russian gas. Croatia, as a potential new hub, can significantly contribute to achieving this goal.
- **Strengthening energy security:** Diversification of supply and increasing gas storage capacity are key to strengthening Europe's energy security. Croatia can play an important role in this process.
- **Regional cooperation:** Croatia can become an important partner for neighboring countries in the energy sector, providing them with access to diversified gas sources.
- **Economic development:** The development of Croatia as an energy hub can have a positive impact on the Croatian economy, creating new jobs and attracting investment.

Challenges and the future:

- **High investment costs:** The expansion and modernization of gas infrastructure require significant investments.
- **Technical challenges:** Integrating new gas sources into the existing network is a technically demanding task.
- **Geopolitical instability:** The geopolitical situation in the region can affect the implementation of projects and the stability of gas supplies.

Conclusion:

Croatia has the potential to become an important energy hub in Europe. However, achieving this goal depends on a number of factors, including the successful implementation of infrastructure projects, a stable geopolitical situation

and continued investments. If it succeeds in fulfilling this role, Croatia will not only strengthen its energy security, but will also contribute to the energy security of the entire Europe.

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