Palacký University Olomouc
Faculty of Law on
International and European Law

Palacký University Olomouc

Strengthening Energy Security through a Sustainable Energy Future: Analyses on the legislative harmonisation for achieving renewable energy targets and transitioning from fossil fuel supply. Azerbaijan Case Study

Turan Jafarli, LL.M.

Doctoral Dissertation.

Supervisor
Doc. JUDr. Michal PETR, Ph.D.

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DECLARATION

The contents and academic analyses conducted in this Ph.D. research reflect my personal perspectives and do not necessarily receive endorsement from Palacky University or any other organisation.

I hereby also certify that all the material and academic works in this dissertation that are not my own work have been identified, properly cited (referenced) and that no material is included for which a degree has previously been conferred on me.

(Signature): _____

(Date): 01 December 2024

Supervised by: Doc. JUDr. Michal PETR, Ph.D.

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I would like to express my profound gratitude to Allah for granting me the opportunities, a suitable environment, a supportive family, and, most importantly, health and intellect, that allowed me to complete this academic work.

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I will summarize my philosophy with four fundamental principles that can lead anyone to success:

1) Trust - having confidence in oneself,
2) Patience - willingness to endure the process,
3) Consistency - persistence in one's efforts, and
4) Prayer - to seek assistance from an infinite power.

Turan Jafarli

ABSTRACT

Title of Dissertation:

Strengthening Energy Security through a Sustainable Energy Future: Analyses on the legislative harmonisation for achieving renewable energy targets and transitioning from fossil fuel supply. Azerbaijan Case Study.

Degree:

Ph.D.

This research will briefly inform the reader about the evolution of energy law and security in two separate geographical and geopolitical regions: Europe and Azerbaijan. Despite their differences, these two regions share a fundamental connection, which is centred on the economic sector, specifically in the supply of oil and gas. The primary focus areas of the research include examining the historical progression of legislative and regulatory frameworks in the oil and gas industry in these regions which has been influenced by international political events. In both regions, the main challenge was to regulate the oil and gas field through various international projects, which eventually led them to harmonize the industry into modern tendencies.

The academic paper will comprehensively analyse the legal transition from traditional fossil fuel supplies to alternative energy sources in the light of EU Law, considering various legal perspectives and disciplines of law. The research provides extensive and detailed information and puts various legal analyses on the subject. Such analyses will reveal all of the hidden aspects, disadvantages, and benefits of both traditional and modern methods of obtaining energy sources and their legislative governance. Conducting analysis helps to find legal solutions to identified problems and gaps in regulatory frameworks, which would be helpful for legal society to achieve sustainable energy targets and can be used as strong arguments for the further regulation of energy resources and strengthening energy security in both regions.

KEYWORDS: transition to renewable energy, harmonisation of the regulatory framework, net-zero targets, regulatory governance of renewable energy projects, fossil fuel, oil and gas contracts, Green Deal Package, European energy security, environmental impacts of oil exploitation, the Caspian Sea energy resources.

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LIST OF ABBREVIATIONS

- ACER: Agency for the Cooperation of Energy Regulators
- AR: Azerbaijan Republic
- BTC: Baku-Tbilisi-Ceyhan
- CBD: Convention on Biological Diversity
- CEP: the Energy Union and the Clean Energy Package
- CJEU: Court of Justice of the European Union
- COP21: the 21st Conference of the Parties that signed the United Nations Framework Convention on Climate Change
- CPC: Caspian Pipeline Consortium
- ECHO: European Civil Protection and Humanitarian Aid Operations
- ECJ: European Court of Justice
- ECT: Energy Charter Treaty
- EDB: European Central Bank
- ETS: Emissions Trading Scheme
- ENP: European Neighbourhood Policy
- EU: European Union
- IBRD: International Bank for Reconstruction and Development
- IEA: International Energy Agency
- IFC: International Financial Corporation
- IMF: International Monetary Fund
- INOGATE: International Programme for the Transportation of Oil and Gas to Europe
- IOC: International Oil Companies
- JV: Joint venture
- MARPOL: International Convention for the Prevention of Pollution from Ships
- MIGA: Multilateral Agency for Investment Insurance
- MOU: Memorandum of Understanding
- NATO: The North Atlantic Treaty Organization
- NDC: National emission reduction targets

- NDC: Nationally Determined Contribution
- NECPs: National Energy and Climate Plans
- NOC: National Oil Companies
- NREAPs: National Renewable Energy Action Plans
- OAPEC: Organisation of Arab Petroleum Exporting Countries
- PPA: Power Purchase Agreements
- PSA: Production Sharing Agreement
- RED: Renewable Energy Directive
- RRPs: Recovery and Resilience Plans
- SA: Service Agreements
- SAARES: The State Agency on Alternative and Renewable Energy Sources
- SCGCP: South Caucasus Gas Pipeline
- SCP: South Caucasus Pipeline
- SOCAR: State Oil Company of the Azerbaijan Republic
- TACIS: Technical Assistance for the Commonwealth of Independent States
- TANAP: Trans-Anatolian Pipeline
- TAP: Trans Adriatic Pipeline
- TEU: Treaty on European Union
- TFEU: Treaty on the Functioning of the European Union
- TRACECA: European-Caucasus- Asian Transportation Authority
- UNCITRAL: United Nations Commission on International Trade Law
- UNCLOS: United Nations Convention on the Law of the Sea
- UNFCCC: United Nations Framework Convention on Climate Change
- USSR: Union of Soviet Socialist Republics
- WTO: World Trade Organization

INTRODUCTION

The main objective of this research is to identify and define the characteristics and fundamental attributes that establish the European Union's energy policy and security. The research aims to enlighten the most important legal aspects that determine and impact the EU's strategy by conducting an in-depth analysis of energy issues beyond its geographical boundaries. Through an extensive review of relevant literature, legal acts, multilateral agreements, policy documents, and empirical data, this study is designed to comprehensively understand the characteristics that underlie the EU's energy security framework with the Republic of Azerbaijan throughout multilateral and long-term agreements. One of the main fundamental points of research is based on the Contract of the Century, which refers to the 1994 Production Sharing Agreement (PSA) between the government of Azerbaijan and a consortium of international oil companies for the exploration and development of oil fields in the Azerbaijani sector of the Caspian Sea[1]. The contract was vital in releasing Azerbaijan's oil reserves, as well as the Baku-Tbilisi-Ceyhan (BTC) Pipeline, the South Caucasus Pipeline (SCP), the Trans-Anatolian Pipeline (TANAP), and the Trans Adriatic Pipeline (TAP), which were built as a direct consequence of the contract to facilitate the delivery of oil and gas from Azerbaijan to European markets. Following that, numerous oil contracts have been signed to develop the oil fields in the Azerbaijani sector of the Caspian Sea, which have included 33 companies from 14 countries for the implementation of these projects. All these oil and gas projects are focused on supplying Europe's energy demand and stabilizing its energy security with traditional energy resources such as oil, coal, natural gas, etc. However, modern energy security is in the shifting phase of its horizons to renewable energy resources which is also the primary focus of this paper. Recognizing the significant influence of traditional fossil energy resources on global climate change and environmental damages, there is a growing recognition of the equal importance and promotion of modern renewable energy resources alongside oil and gas resources. The

[1] Ismayilov, I., Yusifzade, A., Alakbarov, A. (2012). *Human Rights and Transparent Grievance Management: The Way We Operate In Azerbaijan*. ISBN: 978-1-61399-211-1. p.4. Online available at2 < https://doi.org/10.2118/157427-ms>

fundamental objective of the paper is to comprehend the legal viewpoints regarding energy deployment within and between Europe and Azerbaijan regarding the legal facilitation of green energy resources. In addition to this, a brief discussion was held on the legal harmonisation of national legislation to the applied green energy strategies and policies, as well as their current obstacles and transitional challenges.

As stated above, by understanding the previously mentioned legal features, in particular the key provisions and legal framework of the traditional PSA agreements that contributed to the long-term stability of oil and gas investments till the modern age, the outcomes of this study aim to contribute to the current understanding on this topic as well as through the specific case study. The mentioned study will encourage the development of the legal framework for future collaboration in renewable energy resources and the alignment of Azerbaijan's legislation with the European Green Deal[2] package and relevant directives.

[2] Memorandum of Understanding on a Strategic Partnership between the European Union and the Republic of Azerbaijan in the Field of Energy 2006. pp.6-7. Online available at: < https://energy.ec.europa.eu/system/files/2022-12/mou_azerbaijan_en.pdf>

RESEARCH METHODOLOGY

Researched issues and objectives

Recent developments in the world's politics, with particular emphasis on Russia's intervention in Ukraine and the resulting resilient reaction from the international community, have led to a renewed commitment from the EU towards alternative energy sources. In particular, this focus highlights Russia's influence in Ukraine and the subsequent prompt reaction from the international community. In addition, the strategy to use its oil and gas resources as a political weapon by Russia, has raised further awareness of the EU's need to investigate other alternative energy resources and minimise dependence. It wasn't the first time that the use of oil resources as weapons had an impact on governments. The currently operating energy security system was developed as a consequence of several oil crises throughout history, as discussed throughout the paper. The main strategy was to ensure coordination among governments with developed economies in the event of supply disruption and discourage exporters from using "oil weapons" in the future[3]. However, after decades, we can observe that there is a need for new and modern strategies that can be fundamental and sustainable remedies for this threat. After decades, it has become clear that innovative approaches that are fundamental and durable are required to combat this threat. Nevertheless, such remedies cannot be entirely achieved and implemented in a short period of time. As a consequence of the swift shifting of the political climate and events on a regular basis, the lack of legislative readiness, financial, social, and technological compatibility in most governments, as well as the undesirable level of willingness of member states and developing countries to shift to renewable energy resources, are the main barriers to the transition. In addition to the conflict between Russia and Ukraine, there was also a war in the Southern Caucasus. Azerbaijan, one of the major suppliers of oil and gas to the EU, participated in a war with Armenia in 2020 over the Karabakh lands and reclaimed its internationally recognised territory. The 44-day Patriotic War, which began on September 7, 2020, resulted in Azerbaijan's victory. With the post-war truce, the lands of Karabagh were liberated after 30 years of captivity and returned to their

[3] MARY, A. T. The *Political Economy of Middle Eastern Oil, 2004.*pp. 6-7.

homeland, Azerbaijan and this consolidated the country's position in the Caucasus. Nonetheless, a significant impact on the political life of the country and the South Caucasus region occurred[4]. Despite the war, there was not a single interruption or suspension in oil and gas delivery. This was a clear indication of the fact that the legal pillars of the oil and gas contracts which had been signed nearly 30 years ago were based on a rock-solid legal foundation. Given the current political circumstances, the inability to switch to renewable energies in the near future demonstrates that there will be a significant reliance on oil and gas resources for the next few decades. Accordingly, the EU strives to strengthen its relationships with its oil and gas suppliers while simultaneously developing its renewable energy sources.

As mentioned above, the significance of Azerbaijan's status as a primary supplier of natural gas to the EU led to the selection of this country as the primary point of focus for this research. The acknowledgement of Azerbaijan's strategic importance in the energy sector, notably with respect to the supply of natural gas resources to the European market, is the primary factor in the research background. This research intends to dive into the numerous dynamics and legal complications involved with Azerbaijan's supply of gas to the EU by concentrating on Azerbaijan's transition to the Renewable Energy Policies of the European Union. The author claims that the process of Europeanization in Azerbaijan, which is helped by processes of conditionality and externalisation, results in positive consequences for both the European Union and Azerbaijan. These outcomes benefit the EU and Azerbaijan by allowing them to exchange resources and achieve win-win outcomes. However, the legal structure of such relationships is one of the most essential factors that must be analysed for long-term and sustainable cooperation.

Research Questions and Hypotheses

The harmonisation of Azerbaijan's legislation with the objectives and requirements of the EU, particularly in relation to implemented renewable energy policies, requires legal measures, regulatory alignment, and policy integration.

[4] Official website of Prosecutor General's Office of the Republic of Azerbaijan. The 44-day Patriotic War. Online available at: <https://genprosecutor.gov.az/en/page/azerbaycan/i-ve-ii-qarabag-muharibesi/44-gun-suren-veten-muharibesi-ii-qarabag-muharibesi>

In order to enhance cooperation, stimulate the development of renewable energy sources, and overcome obstacles to long-term stability and energy security between the EU and Azerbaijan, it is necessary to consider the key provisions contained within the PSA, the knowledge and experience gained over the course of more than 30 years, and the political challenges that need to be examined.

The research was conducted with the aim of examining and addressing the following questions:

1. What are the existing renewable energy laws, policies, and regulatory frameworks in Azerbaijan and the EU, and how do they contribute to energy security? *(see Chapter I.I and II.I)*
2. What role does EU law play in promoting legal harmonisation and alignment between the energy legislation of the EU and Azerbaijan, specifically in relation to renewable energy objectives? *(Chapter I.II)*
3. What are the key challenges and barriers to the implementation of the EU's renewable energy projects? *(Chapter I.III)*
4. Do the contractual provisions within a Production Sharing Agreement (PSA) in the oil and gas industry ensure legal stability for long-term projects, and how do they align with the EU laws? *(Chapter III.III)*
5. How determination of the legal status of the Caspian Sea impact the implementation of the EU energy security strategies and policies related to its cooperation with Southern Caucasian Republics? *(Chapter II.I and II. IV)*
6. Which regulatory framework and contractual model could be facilitated to ensure further collaboration between the EU and Azerbaijan, particularly in the exploration and utilisation of renewable energy sources? *(Chapter III.II and III.III)*
7. What legal measures and challenges are involved in the harmonisation of Azerbaijan's legislation with the objectives and requirements of the European Green Deal package? *(Chapter III.I and IV.I, IV.II)*

Research Methodology

A legal analysis will be conducted, focusing on the key provisions and legal framework of the Contract of the Century and other relevant agreements to assess their impact on long-term stability, energy security, and renewable energy cooperation. Due to limitations in available data, the study applies primarily qualitative approaches, mainly focusing on existing legal frameworks and analysing them for energy security assessments. Comparative analysis will be employed to examine the similarities and differences in renewable energy laws, policies, and regulatory frameworks between Azerbaijan and the EU, identifying potential areas for harmonisation and alignment. Case studies will be selected to analyse specific projects that exemplify the strategic cooperation between Azerbaijan and the EU in renewable energy, evaluating the legal, economic, and political challenges faced, as well as the outcomes and lessons learned. Empirical data, including statistical information and reports, will be collected to support the analysis and provide empirical evidence on energy production, consumption, and cooperation between Azerbaijan and the EU. The findings of the research will be analysed using qualitative and quantitative methods, leading to policy recommendations for enhancing strategic cooperation, strengthening energy security, promoting harmonisation of legislation, and fostering long-term stability and cooperation between Azerbaijan and the EU in the renewable energy sector.

Scope and Delimitations

The most significant goal of this study is to address the existing research gap and limited literature on the legal aspects of energy security, in particularly those concerning sustainable energy resources in Azerbaijan. Still, the existing research and academic works primarily concentrate on the geopolitical elements of energy security, specifically examining areas such as investments, and politics related to oil, gas, and nuclear safety. The reason behind selecting the EU and Azerbaijan as the focus of this study is to adopt a regional strategy that involves the perspectives of both regions. By doing so, the study intends to identify areas of weakness and eventually propose approaches to addressing and improving these identified legal gaps. The dissertation examines the European and

Southern Caucasian dimensions of energy security, focusing on Azerbaijan as a case study. It involves a comprehensive analysis of the legal framework surrounding this area of study.

The research also provides a comprehensive understanding of the evolution of energy security and the legal foundations that support it in each of the geographical areas. The thesis represents the interconnection of its legal and political nature, as well as the analysis of political challenges and their connected legal consequences.

By conducting an analysis of the interrelated legal and political changes in both regions, this research project is designed to identify the current obstacles and legal deficiencies in the development and compatibility of renewable energy security, with a particular emphasis on Azerbaijan.

Literature Review

The research methodology will involve an extensive literature review, analysis scholarly articles, legal texts, and policy documents to comprehensively understand EU energy policy, renewable energy law, energy security, and the cooperation between Azerbaijan and the EU. The research has also used the works of a number of law scholars who have conducted research in the fields of international law, human rights, international humanitarian law, and related fields, such as Kim T., Raphael J.H., Braun N. J.F., Graca M.C., Rotaru D.V., Pellizonni L., Garvaani G., Craig J., Gerald F., Kolosov Y.M., Oettinger, G., Valde T., Bekyashev K.A., Lion, K., Aleksidze L.A., Moiseyev E.Q., Talalayev A.N., Tunkin Q.I., Ushakov N.A., Entin M.L., Scott N.R., Carro D., Maxlina M., Neshatayeva T.N, Sosna S.A., Pechik A.I., Kazmin E.L., Nilsson A.C. and others. The dissertation has also used the works of Azerbaijani scholars such as Sadigov A.I., Mammadov R.F., Isayev R.C., Babayev S.R., Salimov K.N. and many others.

The dissertation has examined multilateral international agreements, energy security, and bilateral agreements of Azerbaijan, Azerbaijan's domestic law as the basis of normative law. Additionally, the principles and norms of EU law on international legal regulation of transportation, and the agreements of the WTO have also been extensively studied. The dissertation also includes

studies related to the Energy Charter[5], the Lisbon Treaty[6], the Paris Agreement[7], The Energy Roadmap 2050[8], etc. The Law of the Republic of Azerbaijan on Environmental Protection of 1999[9], the Law of the Republic of Azerbaijan on Energy Resources of 1998[10], and other regulations in regard to interstate legislative acts as well as national normative legal acts of other countries related to natural resources have been taken into consideration.

[5] The Energy Charter Treaty (with incorporated treaty amendment) and Related Documents, 14 July 2014.
[6] Treaty on European Union (consolidated version after the Treaty of Lisbon), 2007 O.J. (C 306) 1.
[7] United Nations Framework Convention on Climate Change (UNFCCC). (2015). Paris Agreement.
[8] Energy Roadmap 2050 {COM(2011) 885 final}.
[9] The Law of the Republic of Azerbaijan on Environmental Protection of 1999. Online available at: <http://www.cawater-info.net/library/eng/az_prot_env.pdf>
[10] The Law of the Republic of Azerbaijan on Energy Resources of 1998. Online available at: https://policy.asiapacificenergy.org/sites/default/files/Law%20on%20Energy%20%28EN%29.pdf>

CHAPTER I. ANALYSIS OF THE EUROPEAN UNION'S ENERGY LAW AND SECURITY IN THE CONTEXT OF ITS CURRENT LEGAL FRAMEWORK

I.I. THE EVOLUTION OF EUROPEAN UNION ENERGY SECURITY AND THE ESTABLISHMENT OF THE REGULATORY FRAMEWORK

Summary

Sub-chapter I.I explore the critical link between energy security and energy law. It also defines their core relation with other law disciplines such as European law, international law, investment law, etc. It defines energy law as the framework governing the rights and obligations associated with energy resources. The study explores the historical evolution of the legislative base of traditional fossil fuel energy and modern renewable energy resources, and the construction of a regulatory framework in the EU, with a particular emphasis on the European Economic Community's response to the 1970s oil crises. It briefly examines the liberalisation of the energy sector and single market integration process. Another focus is on the EU's energy policy objectives, which are outlined in Article 194(1) of the Treaty on the Functioning of the European Union. The subchapter digs into the EU's goal of achieving gas supply independence from Russia, leading to the execution of the Fifth Energy Package, "Fit for 55," by 2021. Giving a brief outline of the European Green Deal, this legislative package establishes ambitious targets for 2030 and 2050, highlighting the EU's goal of being the world's first carbon-neutral union by 2050. Examining the regulatory framework and policy-making processes that influence energy security in Europe, with a particular emphasis on the developing legislative framework and its implications for renewable energy resources.

Introduction to Energy Law and Energy Security

Energy security is a fundamental and significant aspect of every government, having a direct impact on a nation's economic, environmental, social, and military policies. However, the questions start at its inception:

- *What are energy law and energy security, understood as independent academic or legal disciplines?*
- *How has the concept of energy security gained significance over the course of history?*
- *What are the contemporary challenges facing the concept of energy security, which is an integral component of International and European law?*

By fully understanding the aforementioned fundamental concepts, readers of this academic research will have the opportunity to gain a comprehensive understanding of the analysis and correctly interpret the author's objectives.

Energy law refers to the unified framework of policies, regulatory rights, and duties associated with energy resources and their various stakeholders, as well as normative legal acts in the energy sector. Adrian Brooks, one of the leading international energy law academics, defined it as: 'the allocation of rights and duties concerning the exploitation of all energy resources between individuals, between individuals and the government, between governments, and between states'[11]. Kim Talus, Raphael J. Heffron, and other significant scholars of energy law advocated the idea that energy law as a legal subject lacks a comprehensive "body of knowledge" or, in other words, lacks a stable foundation of energy jurisprudence that can be used and referred to in the decision-making process. Acts such as multilateral and international agreements, directives, international treaties, principles of intergovernmental and non-governmental institutions, policies, and so on are to be used in modern practises instead of such main jurisprudence. It is considered by many scholars to be a relatively new area of law. However, this is not an indication that it did not exist previously. During the 19th and 20th centuries, there was a lack of energy-related legislation to properly regulate energy-related transactions. Issues raised from management of energy resources and their transportation between stakeholders has been present in various disciplines (mainly regulated within contract law) for over a century. The discipline of energy law is not a fully independent domain of law; rather, it is complexly interconnected with various other legal disciplines such as international law, European law, environmental law, contract law, arbitration, taxation law, torts, administrative law, and others. Consequently, it operates as a broad framework, based on and engaging with the above-mentioned related areas. One of the distinctive characteristics of energy law lies in its international or transnational nature[12]. In past centuries, countries regarded energy supply and use as entirely internal concerns, with the possible exclusion

[11] WAWRYK, A. International Energy Law: An Emerging Academic Discipline. In P. Babie & P. Leadbeter (Eds.). *Law as Change: Engaging with the Life and Scholarship of Adrian Bradbrook*. University of Adelaide Press, 2014, p. 226. Online available at: <http://www.jstor.org/stable/10.20851/j.ctt1sq5xcn.14>

[12] HEFFRON R. J.; TALUS, K. "The Evolution of energy law and energy jurisprudence: Insights for energy analysts and researchers". *Energy Research & Social Science*, *Volume 19*. 2016, ISSN 2214-6296, pp. 2-3. Online available at: <https://doi.org/10.1016/j.erss.2016.05.004>

of the extraction of oil. The internationalisation process of energy law has been significantly enhanced by the implementation of main regulatory mechanisms between the parties to safeguard the rights and duties in the trade of oil across different geographical locations. Despite the aforementioned ideas, it should be noted that over the last decade, a significant amount of researches, books, academic works, and legislative acts have been issued, thereby establishing the primary fundamental foundation for modern Energy Law, which is also being studied in this research.

Energy security refers to the degree of reliability and resilience of essential energy systems. The definition encompasses two primary concepts. The first concept indicates that energy security is not a solitary understanding but rather includes various different systems, such as electricity security, renewable energy security, oil and supply, transportation, etc. The second concept summarised within this concept is vulnerability. In order to examine vulnerabilities, analyses have been carried out in relation to the changing characteristics of energy security over the course of history. Three persistent types of such concerns have been identified: sovereignty, robustness, and resilience.

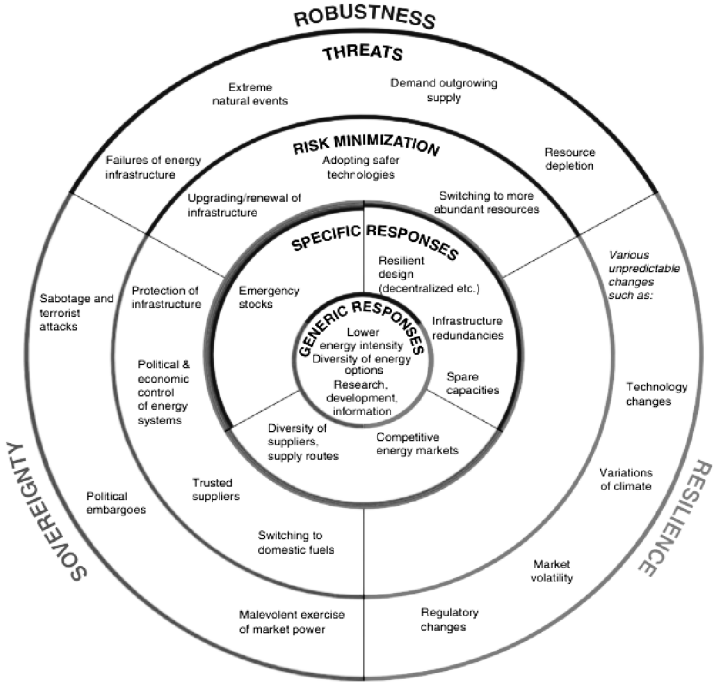

Figure 1. Three perspectives on energy security[13]

The main concern arises from a sovereignty standpoint, addressing the issue of energy control. Is the majority of our oil supplied from specific countries through multilateral oil contracts, or is it primarily produced domestically? The second concern pertains to the duration of energy systems' lifespans. This perspective can be characterised as robustness. The investigation concerns the potential shortages of energy resources and the preparedness of the existing energy infrastructure to face various forms of challenges. The third perspective is the resilience perspective, which examines the ability of systems to respond and recover quickly when faced with disruption[14].

As mentioned in the following chapters, energy security is a highly essential element of the country, as well as a specific region, with a direct effect on social welfare, economic development, and independence in the international political arena. Despite the complexity of such a challenge, it is possible to achieve if there is a coordinated effort by the government, industry, and consumers in collaborative manner. By diversifying energy sources, increasing energy efficiency, investing in green energies and renewables, and developing new technologies, we can achieve stable energy security and create a more sustainable future.

Establishment of the regulatory framework in the EU

The history of manually collecting oil and carbohydrate resources (particularly oil and petrol) from surface seepage, rocky crevasses, or shallow wells in Europe stems from the late mediaeval age. However, only with its usage by the Greeks and Romans for its multi-purposes in their daily lives did oil start to occur intensively in the classical age[15] . Regional and global political movements, socioeconomic constraints, and technological advancements all had an impact on the development of European crude oil industry. Europeans significantly contributed to the development of the current global oil and gas industry, including the formation of its legislative base, the establishment

[13] CHERP, A., JEWELL, J. "The three perspectives on energy security: intellectual history, disciplinary roots, and the potential for integration". *Current Opinion in Environmental Sustainability*. Volume 3, Issue 4, 2011, ISSN 1877-3435, pp. 207

[14] CHERP, A., JEWELL, J. "The three perspectives on energy security: intellectual history, disciplinary roots, and the potential for integration".*Current Opinion in Environmental Sustainability*. Volume 3, Issue 4, 2011, ISSN 1877-3435, pp. 202-212

[15] CRAIG J., GERALI F., MACAULAY F., SORKHABI. R (2018). *The history of the European oil and gas industry - Introduction. pp*. 2-3.

of financial mechanisms, and multilateral relations between countries. Europe used surface seeps and underground mines for oil from the mediaeval period through the end of the nineteenth century. The consumption of oil grew in the 1860s due to enhanced production and refining technology. Shale crude oil was commercially extracted in Europe in the late eighteenth and early nineteenth centuries, but in the second half of the century, traditional oil fields took over the market industry. Coal-based crude oil could no longer meet consumer demand. Before mechanised cable drilling rigs were introduced in the early 1860s, Poland, Romania, Germany, and Italy physically drilled their first commercial oil wells in 1853, 1857, 1859, and 1860[16]. World Wars I and II were significant turning points for the oil business, as the demand for more exploration and transportation became more pronounced than ever before. Nevertheless, despite the endeavour to discover new oil reserves across various countries, the inability to effectively transport the extracted oil through pipelines connecting different geographical regions remained. The building of long-distance and dependable pipes became feasible only following innovations and increased production of welding technologies and metallurgical advancements that occurred after World War II.

Energy security has evolved throughout history to become one of the main concerns of the European continent, and various historical events have contributed to this development. The establishment of the European Coal and Steel Community in 1951 and the signing of the Euratom Treaty in 1956 had a significant impact on the European integration process. Furthermore, this community regained importance following the occurrence of the 1973 Arab oil crisis and the adoption of the 1992 Rio Declaration on Sustainable Development[17].

The European Economic Community was extremely aware of the necessity of ensuring a secure energy supply as a result of its growing reliance on oil that was imported from other countries. In the years 1973 and 1974, this problem was at its most extreme. The Arab members of the Organisation of Arab Petroleum Exporting Countries (OAPEC) were the ones who sparked the oil crisis in 1973 by imposing an oil embargo on countries that supported Israel during the Yom Kippur War. This action led to a chain reaction that resulted in the 1973 oil crisis. The quadrupling

[16] CRAIG, J.; GERALI, F.; MacAULAY, F.; SORKHABU, R. *The history of the European oil and gas industry (1600s–2000s).* Geological Society, London, Special Publications, Volume 465,pp. 1 - 2.
[17] DAMEN, M. *Four challenges of the energy crisis for the EU's strategic autonomy.* April 2023, PE 747.099, pp. 2.

of oil prices resulted in scarcity and extended queues at fuel stations across several nations[18]. The world experienced its first-ever oil crisis, which highlighted the vitality of Energy Security.

In 1979, the Iranian Revolution emerged as a pivotal event with far-reaching effects on the global oil landscape. The Second Oil Crisis, which lasted from 1979 to 1980, represents a turning point in the global energy landscape[19]. The Iranian Revolution and the Iran-Iraq War both significantly disrupted the world's energy markets. As Iran is a significant oil-producing nation, the abrupt reduction in its oil output caused a supply shortage, resulting in a rapid and significant increase in oil prices. The EU relied significantly on oil imports for its industrial and economic activities and found itself in the crosshairs of these disruptions. Due to its reliance on external sources for the majority of its energy requirements, the EU was extremely vulnerable to the supply disruptions caused by the Iranian Revolution. The consequent steep increase in oil prices had a cascading effect on the economies of EU member states, sparking inflationary pressures and necessitating adjustments in economic policy to accommodate the elevated energy costs. In the midst of political upheaval, supply disruptions caused by the revolution sparked debate about the sanctity of bilateral agreements between oil-producing nations and foreign corporations and raised concerns about contractual obligations. Also, the actions of OPEC member states, such as the increase in oil prices and the possible use of oil as a political tool, prompted discussions regarding their compliance with international legal standards.

In Rio de Janeiro, Brazil, in 1992, during the United Nations Conference on Environment and Development (also known as the "Earth's Summit"). The Commission has proposed a set of actions in the form of a package in order to accomplish this objective. Unfortunately, the Commission's proposal went out of place prior to the summit. However, after lasting debates, the policy was adopted at the conference to stabilise greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate[20].

[18] GARAVANI, G. *The International History Review.* September 2011, Vol. 33, No. 3, pp. 480-481.
[19] HAMILTON J.D. *Historical Oil Shocks* (December, 2010). Department of Economics University of California, San Diego, pp.16-17
[20] Official website of UN Sustainable Development Goals, Knowledge Platform. Online available at: <https://sustainabledevelopment.un.org/milestones/unced>

To assess the progress in the implementation of provisions agreed in the United Nations Framework Convention on Climate Change (UNFCCC) which was adopted as a result of the Earth Summit in Berlin in 1995 with the participating countries the first UNFCC conference was held[21]. This conference lays out future international cooperation and commitments in the fight against climate change. The conference played a crucial role in shaping the next round of climate change and energy security negotiations and the development of the Kyoto Protocol. The Kyoto Protocol, adopted in 1997 in Japan, Kyoto, was an important international agreement under the UNFCCC that was a fundamental pillar of the Paris Agreement[22]. It aimed to combat climate change by setting binding greenhouse gas reduction targets for developed countries between 2008 and 2012. In order to help countries achieve their targets, the Protocol establishes mechanisms such as emissions trading, clean development mechanisms and multilateral implementation. However, its effectiveness is limited due to the absence of major emitters and rapid economic growth in developing countries. The fact that the Protocol has not been ratified by major states like the United States and Canada (withdrawn in 2012) is yet another reason for its failure[23]. Countries such as Russia (in 2005) and Australia (in 2007) ratified the protocol lately with a delay that affected the implementation and efficiency of the protocol. The Kyoto Protocol remains an important element in environmental and conservation history, even though the Paris Agreement has superseded it.

Following this, the EU Emissions Trading Scheme (ETS) directive was approved in 2003, and at first, it only covered carbon dioxide emissions in the power sector and a few industries that rely heavily on energy[24]. Over the course of its operation, its scope has broadened to include a wider variety of industries and greenhouse gases. Evidently, in 2005, the first ETS pilot plant was put into operation. The efforts of policy entrepreneurs within the Commission, who emphasised the benefits

[21] Summary of the First Conference of the Parties for the Framework Convention on Climate Change: March 28–April7, 1995 *Eart Negotiations Bulletin, Vol. 12,No. 21.* Published by the International Institute for Sustainable Development (IISD). Online available at: <https://cetesb.sp.gov.br/proclima/wp-content/uploads/sites/36/2014/08/cop-1_ingles.pdf>

[22] Fact Sheet: United Nations Framework Convention on Climate Change/ Kyoto Protocol. UNFCC, February 2011, pp.1-3. Online available at: <https://unfccc.int/files/press/backgrounders/application/pdf/fact_sheet_the_kyoto_protocol.pdf>

[23] PELLIZZONI, L. *Ontological Politics in a Disposable World: The New Mastery of Nature.* Ashgate Publishing Company, 2015, p. 16.

[24] Directive 2003/87/EC of the European Parliament and of the Council of 13 October 2003 establishing a scheme for greenhouse gas emission allowance trading. Online available at: <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32003L0087>

of the ETS to all stakeholder groups, were largely responsible for this success. The EU ETS serves as a fundamental component of the European Union's strategy to address climate change, functioning as a primary instrument for achieving cost-effective reductions in greenhouse gas emissions in the largest carbon market in the world[25]. The new EU ETS Directive came into effect on April 8, 2018, and establishes the structure for the fourth trading phase, spanning from 2021 to 2030. In July 2021, the European Commission put up a proposal to amend the EU ETS Directive as part of the "Fit for 55" legislative package. This plan aims to attain climate neutrality in the European Union by 2050, a topic that will be further examined in the following paragraphs.

The 21st Conference of the Parties (COP 21) to the UNFCCC adopted the Paris Agreement on 12 December 2015 in France, Paris[26]. The agreement addresses climate change goals that the parties will establish after 2020. Unlike the Kyoto Protocol, which exclusively binds developed countries to specified emission reduction objectives, the Paris Agreement encourages all countries to establish national emission reduction targets (NDCs), implement measures for achieving their goals, and report on their progress[27]. After the Paris Agreement, the European Union's energy policy shifted its attention towards decarbonising the energy sector, implementing renewable energy sources, enhancing energy efficiency, and establishing ambitious targets for reducing emissions. The European Union endeavours to take the lead in transitioning process towards an energy system that is sustainable, secure, and low in carbon emissions, while ensuring that its endeavours are in line with the targets of the Paris Agreement. Overall, the Paris Agreement has led to the integration of climate goals, the switch to renewable energy, the improvement of energy efficiency, the strengthening of infrastructure resilience, and the encouragement of international cooperation to improve climate resilience in energy systems. These are all parts of the evolution of energy security. The objective is to ensure dependable, sustainable, and resilient energy sources while also addressing the issues brought about by climate change.

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[25] DELLINK, R. *Towards global carbon pricing: Direct and indirect linking of carbon markets*. OECD Journal: Economic Studies, Vol. 2013/1, pp.209-210. Online available at: <http://dx.doi.org/10.1787/eco_studies-2013-5k421kk9j3vb>

[26] The full official text of the Paris Agreement. United Nations, 2015. Online available at: <http://unfccc.int/files/essential_background/convention/application/pdf/english_paris_agreement. pdf>

[27] ERBACH, G. *The Paris Agreement A new framework for global climate action* / European Parliamentary Research Service. January 2016, pp.1-2. Online available at: <https://www.europarl.europa.eu/RegData/etudes/BRIE/2016/573910/EPRS_BRI(2016)573910_EN.pdf>

In February 2015, the European Commission initiated a blueprint for the Energy Union policy, designed to provide member states with energy that was secure, affordable, and environmentally favourable. The policy emphasized issues such as research and development, decarbonization, energy efficiency, and energy source diversification[28].The Energy Union is based on a set of five interconnected and mutually supportive pillars: (1) security, solidarity and trust through co-operation between member states; (2) the finalization of the internal energy market; (3) moderation of demand through energy efficiency; (4) the decarbonization of the European energy mix; and (5) technologies, research and innovation[29] .The Energy Union policy framework (2014-19) has been responsible for fostering better uniformity in the development of national and EU policies, as well as alignment of aims along the aforementioned five pillars. The level of achievement of the 2030 energy and climate targets set by the European Union will be contingent upon the degree of ambition demonstrated by its constituent member states. The European Union has implemented a distinctive governance structure, known as the National Energy and Climate Plans (NECPs), under the Energy Union and the Clean Energy Package (CEP). The proposed measures aim to promote coherence between the energy and climate policies of the European Union and its member states, while affording the latter an opportunity to determine the level of their desired goals[30].

The multiple calls for measures to prevent internal market distortions, strengthen the legitimacy of EU citizens in the member states, build European identity as a strong figure on the international stage, develop energy security, and improve the overall competitiveness of European industry through an ecological modernization programme have been encouraging for the progress of EU energy and climate policies, as well as for its international leadership position. The energy security system that is in place today was developed as a response to the 1973 Arab oil embargo with the goals of ensuring coordination among nations with industrialised economies in the event

[28] ERBACH, G. *Energy Union New impetus for coordination and integration of energy policies in the EU*/European Parliamentary Research Service. March, 2015, pp.1-2.

[29] European Commission, "Opening Speech- EU Energy Policy and Competitiveness" press release, 17 November 2014. Online available at: <https://ec.europa.eu/commission/presscorner/api/files/attachment/806140/SPEECH-14-1883_en.pdf>

[30] *Energy Policy Review, European Union 2020*. Official website of International Energy Agency, France, June 2020, pp. 44-45. Online available at: <https://iea.blob.core.windows.net/assets/ec7cc7e5-f638-431b-ab6e-86f62aa5752b/European_Union_2020_Energy_Policy_Review.pdf>

of a supply disruption, promoting cooperation on energy policies, preventing challenging moves for supplies, and discouraging exporters from using "oil weapons" in the future. The International Energy Agency (IEA) has been one of the most important components of the aforementioned system. The IEA was established in November 1974 to ensure the safety and security of energy resources in industrialised countries after the 1973 crisis[31]. In the 1980s and 1990s, the European Union made it one of its primary priorities to reduce its reliance on fossil fuels while also increasing the variety of energy sources at its disposal. Even though nuclear energy and the implementation of nuclear policies were in the EU's interest, the Chernobyl disaster that occurred on April 26, 1986, at the nuclear plant brought up concerns regarding nuclear safety and had an impact on the energy security strategy[32]. After it occurred, the most experienced international regulatory organisations and the most prominent regulators in the world acted swiftly to implement significant and critical safety measures and actions. Afterwards, a considerable number of binding international treaties and non-binding instruments aiming at the safety and security of nuclear powers and law regimes have been accepted[33].

Liberalisation of Energy Sectors and Integration of Energy Markets into a Single One

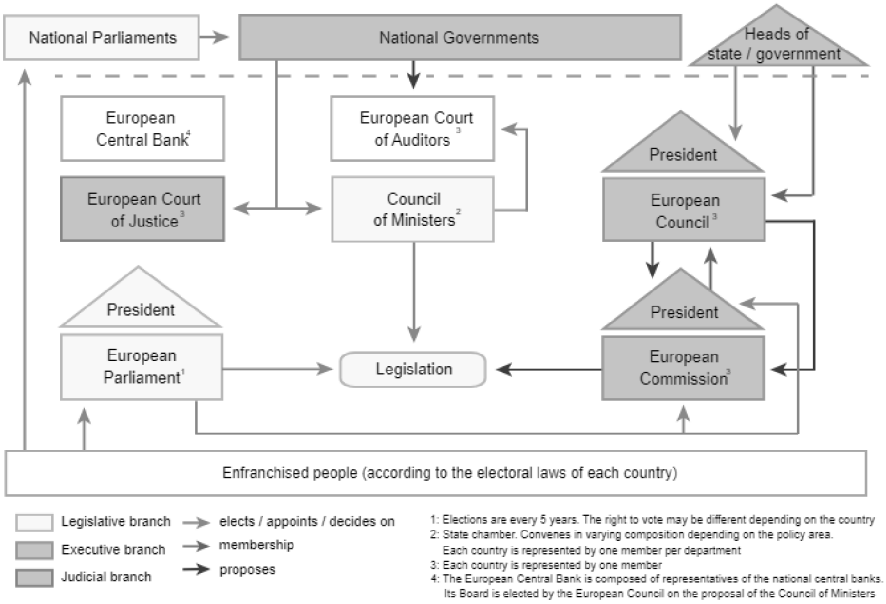
Prior to examining the liberation process, it is significant to provide readers of this research paper with a brief overview of the EU's decision-making process related to energy affairs. It is important to outline the key institutions that play an important part in shaping and executing decisions within the EU's legislative framework. The chart presented in Figure 1 below provides an explanation of the organisational structure within the EU, specifically highlighting the three main branches of government: the legislative, executive, and judicial bodies. This visualisation is intended to clarify the intricate connection and distribution of power among these institutions, which collectively shape the decision-making processes and governance mechanisms. The European Commission, as the executive branch of the EU, possesses the exclusive power to initiate legislation

[31] BAMBERGER, S. *History of International Energy Agency.* VOLUME FOUR SUPPLEMENT TO VOLUMES I, II & III, 2004, pp. 6.

[32] STEADMAN, P.; HODGKINSON, S.*Nuclear Disasters & The Built Environment: A Report to the Royal Institute*. 1990. Butterworth Architecture. p. 55

[33] GUNTHER, H. "Après Tchernobyl : Quelques réflexions sur le programme législatif multilateral à l'ordre du jour" in: *General Review of Public International Law,* Volume 92, 1988, p. 5

within the supranational organisation. However, it cannot make final decision. The EU Council can also ask the Commission to come up with new laws[34].



[35]*Figure 2. Political System of the European Union*

The Member States' energy ministers structure the Council of Ministers. Ministers in the Council usually prioritise their Member State's interests. The European Parliament is the legislative branch of the union. Previously, decisions had to be taken unanimously in both organisations, but the Lisbon Treaty allows qualified majorities, which is explained in the next paragraph. Member States are officially represented in the EU Council by their ministers or heads of states.

Until the 2009 Lisbon Treaty, the EU's explicit competence to regulate the sector was left to the Member States. Until then, energy had mostly been addressed in the framework of common rules on legal harmonization and environmental policy. After eight years of heated debates and complex debates, the EU's 27 Member States ratified the treaty, which added Article 194 to the TFEU, enhancing the harmonisation of common energy policies. The Lisbon Treaty gave the European Parliament law-making powers and brought it on an equal footing with the Council of Ministers in the decision-making process related to the energy markets. Basically, both the EU and

[34] PEPERMANS, G. European Energy Market Liberalization: Experiences and Challenges. *International Journal of Economic Policy Studies*. 2018, pp.4-5. Online available at: <https://doi.org/10.1007/s42495-018-0009-0>
[35] Official website of the European Geosciences Union. Online available at: <https://www.egu.eu/policy/eu/>

its member states might initiate and adopt legally binding acts for the strengthening and development of energy policy[36]. This was a new beginning for the energy market. A notable modification to European primary law is the addition of a dedicated chapter on the regulation and development of the energy market. Article 194(1) of the TFEU involves four primary objectives, which will be thoroughly examined in the upcoming subchapter.

The Lisbon Treaty has a vital effect on the development and certainty of the energy security of the EU. It enhanced the European Parliament's democratic legitimacy and influence in shaping legislation, including in the energy sector, as the Treaty granted co-decision authority not only in energy but also in different crucial areas. The treaty led to a more substantial and comprehensive development of climate change policies in the region, which had a direct effect on the further strengthening of renewable energy sources as the EU developed to become the world's first climate-neutral continent[37].

The electricity market that is open to free competition, as it exists today, is still in its formative stages and subject to expansion due to the development of renewable energy resources. A single company regulated all of the electricity production across Europe until about 30 years ago. The generation, transmission, and distribution of electrical power were all the responsibility of "vertically integrated" businesses. These businesses were able to charge whatever prices they wanted for electricity because there wasn't much competition between them. Given that they also owned the electricity infrastructure, these companies prevented any other competitors from entering the market. Vertically integrated electricity that was already operational had the potential to play the role of gatekeepers to the energy in some sense. The early 2000s in the EU's energy market could be assessed as the liberalisation of energy sectors and the integration of national energy markets into a single, common one. The integrated energy market encompasses a reduction of contradictions between member states, the development of common regulations, competitiveness between European suppliers, price alignment, shared and mutually identified environmental protection goals, etc. Articles 194 and 114 of the TFEU serve as the legal foundation for the liberalisation and harmonisation of the EU internal energy market[38]. The European Union

[36] Article 2.2 TFEU.

[37] GRACA, M.C. *EU Energy and Climate Change Strategy*. (2012) Vol. 40 - Energy J, pp. 19-22

[38] Article 194 and Article 114. *Treaty on the Functioning of the European Union (TFEU).* Official Journal of the European Union, 26.10.2012, C 326/47, pp.94,134.

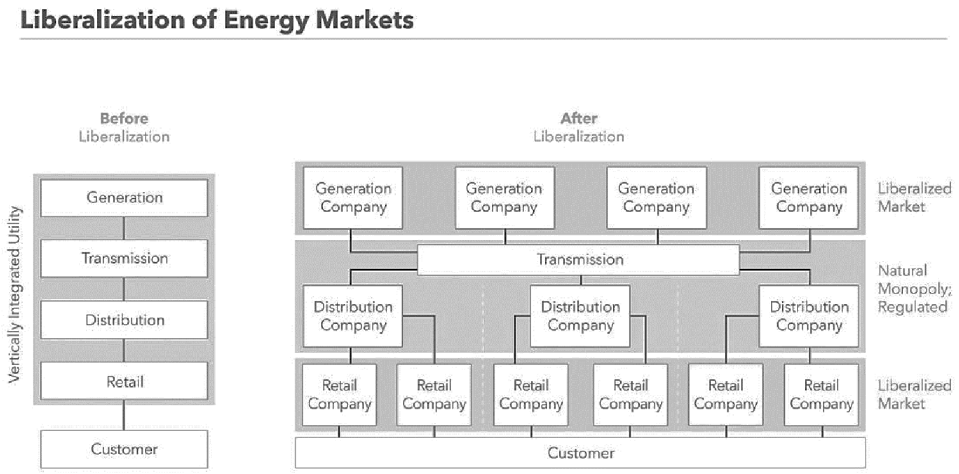
has approved a variety of laws over the years. Regarding unified regulations for internal electricity and gas markets, the first directive was enacted in 1996 for electricity and in 1998 for gas[39]. These two directives, also known as the First Energy Package, initiated the liberalisation of the European energy market. The directives aimed to establish a single, integrated electricity market in Europe to reduce overall costs in EU member states by building a competitive environment. The second, more complicated directive—which was issued in 2003—had as its ultimate goal the establishment of the legal framework for complete market liberalisation. The adoption of the Second Energy Package included a second Directive on the electricity (and gas) market. The second electricity Directive empowers suppliers to enter markets in other Member States and gives consumers the freedom to choose their supplier[40]. The third energy directive, which was implemented in 2009, also encourages wider market liberalisation and creates a cooperative body for energy regulators in the electricity and gas markets[41].This package effectively achieves the integration of the electricity and gas markets in Europe. The primary components of this framework consist of ownership unbundling, which involves separating generating and retail businesses from transmission activities, as well as requiring all member States to create a National Regulatory Authority. Furthermore, this development resulted in member states establishing the Agency for the Cooperation of Energy Regulators (ACER). ACER serves as a platform for National Regulators to collaborate on matters related to the European Union[42].

[39] Directive 96/92/EC. Online available at: <https://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=CELEX:31996L0092>

[40] Directive 2003/54/EC. Online available at: <https://eur-lex.europa.eu/legal-content/EN/ALL/?uri=celex%3A32003L0054>

[41] ROTARU, D.V. *A Glance at the European Energy Market Liberalization.* CES Working Papers, ISSN 2067-7693, Alexandru Ioan Cuza University of Iasi, Centre for European Studies, 2013, Iasi, Vol. 5, Iss. 1, pp. 100-110

[42] PEPERMANS, G. European Energy Market Liberalization: Experiences and Challenges. *International Journal of Economic Policy Studies*. 2018, pp.6-7. Online available at: <https://doi.org/10.1007/s42495-018-0009-0>



[43] *Figure 3. The supply chain chart after and before liberalisation is presented above*

An additional noteworthy endeavour is the Climate and Energy Package 2020, which was introduced in January 2008. The present package outlines three key objectives for the EU policy formulation that had a substantial role in the establishment of an internal electricity market. Firstly, it aims to achieve a reduction of 20% in EU greenhouse gas emissions, exceeding the levels recorded in 1990. Secondly, it seeks to raise the proportion of renewable energy sources in EU energy consumption to a significant 20%. Lastly, it endeavours to enhance energy efficiency, which is predicted for 2020. The pursuit of all of these targets possesses the capacity to exert a substantial influence on the operational characteristics of the domestic energy market of the EU[44].

The fourth Energy Package was adopted in 2019 and consisted of a directive (Electricity Directive (EU) 2019/944) and three regulations (Electricity Regulation (EU) 2019/943, Risk-Preparedness Regulation (EU) 2019/941 and EU Agency for the Cooperation of Energy Regulators (ACER) Regulation (EU) 2019/942)[45]. This time, new regulations for the electricity market were set up to encourage the utilisation of renewable energy sources and investment in this field.

[43] What does Liberalization and Unbundling of Energy Markets mean?. Next Kraftwerke Co., Germany (2022). Online available at: <https://www.next-kraftwerke.com/knowledge/liberalization-energy-markets>

[44] FROGGATT, A. *A Comparison of the European Climate and Energy 2020 and 2030 Packages.* University of Exeter, Energy Policy Group, working paper:1506 (Nov.2015), pp. 1-2

[45] MATTEO, C. *Fact Sheets on the European Union - 2023*. 04/2023. pp. 2-3. Online available at: <https://www.europarl.europa.eu/factsheets/en/home>

Following Russia's invasion of Ukraine, the EU decided to take urgent steps to save fossil fuel energy while increasing the consumption of renewable energy. Ensuring its gas supply independence from Russia, the EU implemented the Fifth Energy Package “Fit for 55” in 2021 which targeted new goals for 2030 and 2050 on the energy market[46]. This legislative proposal package is considered a vital part of the European Green Deal which aimed by 2050 to be the planet's First Climate Neutral Union. It has targets that extend to a wide variety of sectors, including housing, heavy industry, biodiversity, energy, transport, health, and food. It includes legislation and strategies that significantly decrease greenhouse gas emissions and encourage renewable energy. The package also presents ambitious steps including raising the EU's emissions reduction target, as also mentioned above, expanding the EU ETS to new industries, and enforcing energy efficiency and renewable energy deployment standards. Fit for 55 also proposes a carbon border adjustment system and energy market competitiveness. This package shows the EU's commitment to climate change and a cleaner future.

The liberalisation process of the energy market has gradually become the most important factor for the EU from a geopolitical point of view, and it has taken decades to establish a competitive and harmonised market. As a vital source of modern life, energy sources and sectors have always been one of the fundamental matters in which Europe is particularly interested[47].

[46] "2022 Fit for 55". *European Council, Council of the European Union.* 2022. Online available at: <*ht*tps://www.consilium.europa.eu/en/policies/green-deal/fit-for-55-the-eu-plan-for-a-green-transition/>

[47] RAJAVUORI, M.; HUHTA, K.; Digitalization of security in the energy sector: evolution of EU law and policy. *The Journal of World Energy Law & Business.* Volume 13, Issue 4, August 2020, pp.353–367. Online available at: <https://doi.org/10.1093/jwelb/jwaa030>

I.II. ARTICLE 194 OF TFEU AS CORNERSTONE OF ENERGY GOVERNANCE WITHIN EU PRIMARY LAW

Summary

This subchapter examines the role and regulatory scope of Article 194 TFEU on energy objectives within the framework of EU primary law. It outlines how the Article defines the EU's commitment to energy governance and highlights its role in balancing different stakeholders, while maintaining the general principles of EU law.

Energy resources and their exploitation have consistently been a delicate subject for Member States due to their crucial role in national priorities and ensuring energy security. Governments exhibited limited endorsement of this idea of transferring decision-making power to the EU in the energy sector. Nevertheless, the developing energy infrastructure and globalisation tendency, along with the cross-border nature of the energy market, influenced them to engage in the process of harmonisation. Energy has become a shared competence between the EU and the Member States. Due to the faced political and practical challenges for many years, the codification of discussed Article 194 of TFEU was finally achieved as a result of the Treaty of Lisbon in December 2009. The article holds the distinction of being the inaugural piece of legislative measure in the energy law history of the EU to establish a legal basis within the primary law in this sector. The Treaty ensured that both the EU and its member states have the authority to create laws and enforce them in the energy sector. However, member states still have the autonomy to decide their own energy resources and combinations. To fully comprehend the Article and its legal characteristics, it is important to carry out its methodical examination, considering its legal nature within the primary law of the EU, as well as its subjectivity to judicial scrutiny and its scope of applicability. There are four main objectives of the energy policy stated in the Article 194 (1) of the TFEU:

> *In the context of the establishment and functioning of the internal market and with regard for the need to preserve and improve the environment, Union policy on energy shall aim, in a spirit of solidarity between Member States, to:*
>
> *(a) ensure the functioning of the energy market;*
> *(b) ensure security of energy supply in the Union;*
> *(c) promote energy efficiency and energy saving and the development of new and renewable forms of energy; and*

(d) promote the interconnection of energy networks[48].

It is noteworthy to stress that the Article carries fundamental components of both EU and international law. It encompasses the core principles of international public law concerning environmental protection, cross-border trade, and investment. Furthermore, the attraction of private sector investments for the promotion of energy efficiency, development of renewable energy infrastructures, and construction of interconnection between the regions makes it the primary element of international private law.

When implementing appropriate measures, as a “golden rule”, it is crucial to follow fundamental EU law principles such as sovereignty, proportionality, subsidiarity, and justiciability, as well as solidarity, just like in other areas[49]. The first section of the Article stated that four EU energy policy objectives ((a)-(d)) should be employed in consideration of legal principles of "the establishment and functioning of the internal market and with regard for the need to preserve and improve the environment" while maintaining “a spirit of solidarity between Member States”. These principles are defined as the competence clauses that outline the scope and objective boundaries of the EU regarding energy resources. Furthermore, these principles also establish the legal foundation and standards for secondary legislative measures[50].

Energy Policy Objectives within Article 194.

Functioning of the energy market (Article 194 (1)(a)):

The first objective of the Article is to establish a competitive and single internal energy market in the energy sector, which is critical for achieving maximum efficiency and fair equal pricing strategies across all Member States. To achieve this goal, the national legislation of the Member States must be harmonised with union-level legislation, and trade barriers and bureaucracies must be reduced in order to comply with the internal market principles outlined in the EU statute. All of these measures contribute to a uniform regulatory framework that facilitates cross-border energy

[48] Article 194(1)(a)–(d) TFEU

[49] HUHTA, K. The scope of State Sovereignty under Article 194(2) TFEU and the evolution of EU competences in the energy sector. *International and Comparative Law Quarterly*. (2021). 70. 991-1010. 10.1017/S0020589321000269, p.992

[50] KASCHNY, L. Energy Justice and the Principles of Article 194(1) TFEU Governing EU Energy Policy. *Transnational Environmental Law.* Volume 12, Issue 2, July 2023, pp. 270 - 294

commerce, ensures fair competition, and protects end consumer interests. On the other hand, this objective encompasses the regulatory scope within not only within the EU level, but also in the international level. Thus, trade and commerce links between the EU internal market and other countries in the energy sector are subject to the WTO's fundamental principles of trade liberalisation and non-discrimination. Section (a) of the Article defines the fundamental scope of market operation for the energy section. Establishing a competitive and integrated internal energy market is critical for ensuring efficiency and fair pricing among member states. This entails harmonization of regulations and removing trade barriers in accordance with internal market principles.

Ensuring the security of energy supply in the Union (Article 194 (1)(b)):

As the primary focus of the research, this objective seeks to reduce the risks associated with relying on external energy suppliers. As history has shown, at times of geopolitical tension, the primary carbohydrogen energy supplier may use this as a political tool to gain control and manage the buyer countries. However, as part of this goal, the EU intends to diversify energy sources and supply routes in order to improve reliability and reduce reliance on sources outside the EU. The EU's strong energy security protects its Member States while also strengthening its geopolitical position. However, as the main case of this research, having strong relationships based on comprehensive legal bases with supplier countries such as Azerbaijan not only helps the EU ensure its energy market security, but also gives it a strong position in energy governance and political diplomacy in regions. The legislative acts, such as the Third Energy Package (2009), Clean Energy for All Europeans Package (2019), and other relative legislation examined in the paper were created to liberalise the gas and electricity markets, improve consumer rights, and encourage cross-border energy trade which constructed based on Article 194 (1)(b).

Promotion of energy efficiency and energy saving and the development of new and renewable forms of energy; (Article 194 (1)(c)):

The objective plays a crucial role in developing renewable energy policies as it establishes the legal foundation in EU law for harmonising and transitioning Member States towards green

energies. However, this does not mean that there was not any base in previous treaties regarding renewables before. However, Lisbon treaty introduced more possibilites than ever before for the EU to put the transition as a direct goal. The objective is achieved by codification of Directive 2018/2001 (RED II) and Directive 2012/27/EU (EED), which set compulsory targets for Member States regarding the utilisation of renewable energy sources and the implementation of energy-saving policies. Directive 2012/27/EU (EED) established measures, mechanisms, and legally binding instruments to facilitate the EU in achieving 20% energy efficiency by the year 2020. Directive 2018/2001 (RED II) increases the target amount to 32% by 2030. This directive aims to promote the development of advanced renewable energy sources such as solar, bioenergy, and wind energy. In the shed of Article 194, the Directives improve the legal framework for a low-carbon economy, in line with the European Green Deal which is targeting zero carbon emission by 2050 and international agreements such as the Paris Agreement, to advance the EU's wider environmental goals[51].

Promotion of the interconnection of energy networks (Article 194 (1)(d)):

The subsection of the Article highlights the importance of efficient energy transmission and distribution among Member States. The EU lays the groundwork for improved energy security, competition, and the use of renewable energy sources by facilitating national energy market integration and providing financial support through initiatives such as the Trans-European Networks for Energy (TEN-E). The specific projects included TEN-E receives special status and becomes the subjects of the Projects of Common Interest (PCIs), which are on the most important list, exemplifies the practical implementation of energy-efficient infrastructure projects that improve interconnectivity and resilience within the EU's energy networks[52].

[51] MALINAUSKAITE, J.; JOUHARA, H.; et al. *Energy efficiency in the industrial sector in the EU, Slovenia, and Spain. Energy*. (2020) 208, 118398, (Oxford, England). https://doi.org/10.1016/j.energy.2020.118398

[52]Official website of the European Comission. Infrastructure. Online available at: < https://energy.ec.europa.eu/topics/infrastructure_en>

Analysis of Article 194 in the context of the fundamental principles of EU law.

1. **Sovereignty and Subsidiarity**: The Article upholds the sovereign rights of Member States over their natural resources, as well as their freedom to choose their energy mix and energy structures. Although the EU has the authority for governing competence, the Article acknowledges the boundaries of its application. The second section of the Article establishes specific boundaries whereby with stating that "…*such measures shall not affect a Member State's right to determine the conditions for exploiting its energy resources, its choice between different energy sources and the general structure of its energy supply*…"[53]. However, one of the points that has been debated is how to effectively implement these limits while the EU actively promotes the transition to renewable energy with its regulatory and legislative functions. Such legal collisions have been governed by the case law. In the case C-5/16, Poland v. Parliament and Council[54], Poland raised an appeal to Directive 2015/1513, contending that it violated the fundamental principles of legislative codification and legal clarity. The CJEU has confirmed the Directive's legitimacy and dismissed the appeal, highlighting its rationale in addressing the indirect land-use change (ILUC) effects of biofuels. Article 194 has relativity to this appeal since it plays as a legal foundation in primary law regulating the energy sector to find a harmonious equilibrium between the energy and environmental objectives of the EU as a whole, while at the same time respecting the sovereignty of Member States to choose their own energy policies. Poland claimed that the enactment of the law adoption has followed a regular parliamentary route rather than a special legislative approach. Nevertheless, the Court concluded that the goals of environmental policy directly influence the energy sectors of Member States. The special legislative procedure is exclusively applicable where the primary objective of a proposal is to substantially alter a Member State's energy supply structure and source selection[55].

[53] Article 194 (2)(2), TFEU.
[54] C-5/16 - Poland v Parliament and Council. Online available at: < https://curia.europa.eu/juris/liste.jsf?language=en&num=C-5/16>2
[55]

2. Solidarity**:** Generally, two types of solidarity have been identified in EU primary law in the energy context, both of which allow the EU to enact legislation in this sector. The first is governed by Article 122 of the TFEU, which grants the Council the authority to act in specific cases as "appropriate to the economic situation, in particular if severe difficulties arise in the supply of certain products, notably in the energy sector." Thus, such measures can be implemented during a crisis to restore the EU's oil supply. However, Article 194 addresses the solidarity context at the EU level in order to ensure the smooth operation of the internal energy market[56]. In the first sentence of the Article, it is also stated that "in a spirit of solidarity between Member States". The most recent case involving solidarity was (C-848/19 P - Germany v Poland) Opal judgement by the ECJ in September 2019. The European Commission's decision was overturned by the court due to a "breach of the principle of energy solidarity". The Commission's decision to give Gazprom full access to OPAL's capacity. The ruling emphasised the importance of balancing infrastructure access with wider energy security concerns among Eastern European member states, stating that Gazprom cannot access over 50 % of OPAL capacity[57].
3. Proportionality**:** As one of the main principles of EU law, proportionality in relation to Article 194 requires that EU energy policies be designed in proportion to their objectives in order to maintain the balance of achieving the intended goal while preserving the fundamental rights of Member States and end consumers. Considering the governance of ongoing projects and infrastructure works related to the transition to renewable energy while aiming for a zero-emission target, the interests of various stakeholders are occasionally jeopardized. In particular form, this perspective, this principle is especially important for protecting each party's rights and fundamental principles. The case of Commission v. Germany provides insight into the principle's functionality[58]. The CJEU determined that Germany violated the internal electricity market regulations outlined in Directive 2009/72/EC[59], which established

[56] LEONIE, R.; HUHTA, K. Solidarity in European Union law and its application in the energy sector. *International and Comparative Law Quarterly*. 2023;72(3):771-791. doi:10.1017/S002058932300026X.
[57] C-848/19 P - Germany v Poland. Online available at: < https://curia.europa.eu/juris/liste.jsf?num=C-848/19>
[58] Case Case C-718/18 Commission v Germany. Online available at: <https://curia.europa.eu/juris/liste.jsf?num=C-718/18>

common rules and legal framework for advancing renewable energy sources. The Court ruled that Germany failed to guarantee the operational autonomy and freedom of its transmission system operators from generation and supply operations, which is directly resulting in a restriction of the internal market's fundamental freedoms in the energy sector. The CJEU via application of proportionality assessment, concluded that Germany's measures were insufficient to achieve the directive's goal of ensuring operators' independence. Furthermore, it was stated that the desired outcomes of energy policies under the TFEU cannot exceed their proportionate objectives. As a result, measures taken by Germany were deemed inadequate and disproportionate because it did not meet the proportionality rights of the energy market subjects.

4. Justiciability**:** Justiciability of Article 194 (1) has been subject to debuts between legal scholars. Given that Article 3 (3)[60] sets broad scope of economic objectives under terms of "balanced economic growth" or “internal market", Article 194 specifies this approach in terms of the energy field. Thus, Article 194 gives specific and energy-focused objectives which are considered to be "guiding principles". Scholars debut the wordings of Article 194, that use of terms such as "in spirit of” or "in the context of' raises uncertainty within its justiciability. Even though it does not provide any absolute requirements or specific energy objectives, the article's purpose is to lay the groundwork for the member states to collaborate to achieve the same objectives. In addition, from the perspective of EU law, the establishment of such a broad target provides the freedom of the states to return to the target without being constrained by the terms of Article 3(3) TEU legislative barriers. It’s strictly vital to the Member States during the establishment of legal norms to follow the fundamental requirements set with the "guiding principles" outlined in Article 194. Such legal norms and decisions are subject to judicial review, ensuring compliance with the rule of law and the main principles of EU Law.

[60] Article 3(3) TEU

I.III. THE LEGISLATIVE AND REGULATORY FRAMEWORK OF RENEWABLE ENERGY SOURCES IN THE EU

Summary

Sub-chapter I.III focuses on the complex legislative and regulatory framework that governs renewable energy sources in the EU. Analyses also address a wide range of legal issues, such as regulatory, administrative, contractual, and environmental concerns. As stated on the subsequent pages, the foundational importance of Article 194 of the Treaty on the Functioning of the EU which outlines the EU's energy policy goals, including energy efficiency and renewable energy sources has been particularly highlighted. The subchapter analyses also the Renewable Energy Directive (RED) and other legislative acts, which accelerated the EU's transition to sustainable energy practices after the 1970s oil shocks, resulting in intense attention to alternative energy sources which is leading to Green Europe. The EU's other interconnected discipline for energy and environmental protection and development relies heavily on the State Aid Guidelines. These guidelines establish a legislative framework for allocating financial resources to renewable energy projects while ensuring strict compliance with EU competition and antitrust legislation in all Member States. This section briefly explores the legislative framework and its enhancement that supports the EU's strategic goals for renewable energy development and regulation.

Renewable energy law demonstrates a dynamic and progressive course, as it encompasses a variety of legal fields, including regulatory, administrative, contractual, environmental, and several others. These structures are intimately connected to the implementation, installation, expansion, and utilisation of sustainable energy sources within different geographies. The international community is presently faced with an urgent need for fundamental change in the prevailing reliance on fossil fuels to implement cleaner and more environmentally friendly alternative resources. From such a perspective, the renewable energy law came to light as a vital framework that holds significant relevance in accomplishing the aforementioned objectives. However, there is a constant misconception between renewable energy and sustainable energy. Many people equate renewable energy with sustainable energy, yet both concepts mean different things. Renewable energy is produced from resources that regenerate themselves over time. This category includes a wide range of eco-friendly power sources, such as wind, solar, hydro, bio, geothermal, and water. But sustainable energy is to ensure that future generations will be able to fulfil their own energy

demands without compromising those of the current one. Natural processes are the source of renewable energy and may also be used to create additional resources. However, sustainable energy is that which can continuously meet a society's demands, both today and in the foreseeable future.

But what are the global benefits of implementing renewable energy sources? As mentioned above, renewable energy comes from sources that can keep regenerating themselves forever. This means that there will always be a supply. Sun, wind, water, natural heat, and biomass are the most common sources of energy. About 80% of all the energy that people use comes from fossil sources. Still, the use of green energy sources is growing quickly around the world[61]. There are many benefits to using renewable energy. First of all, it could help slow down climate change because it doesn't directly release greenhouse gases. The only kind of emissions that come from them are indirect ones. These are caused by the making of parts, their installation, use, and effective maintenance. Second, renewable energy sources can reduce pollution and, as a result, reduce health risks. Renewable energy systems like wind, sun, hydropower, geothermal, and biomass produce little to no air pollution, while non-renewable energy sources tend to produce a lot more pollution. Renewable energy is seen as a good choice because it is a reliable and long-lasting source of energy. Renewable energy sources are called that because they can always produce more energy. It is unlikely that all the resources will be used up. Renewable facilities have low operating costs and often use power sources that are free of charge. Because of this, the prices of renewable energy tend to stay stable over a long period of time. Renewable energy has a lot of good things about it, but it also has some bad things about it. Getting a lot of power from renewable sources is harder than getting it from fossil fuels. Building wind farms and dams could disrupt wildlife populations and change their migration habits, which could lead to ecological degradation in the long run[62]. Both sun and wind energy can only be used for short periods of time. Solar and wind power, for example, only make electricity when the sun is shining or when the wind is blowing. Batteries can store energy that isn't being used right now so that it can be used later. But they often come with high costs. Renewable energy does have some problems, but it also offers a good, sustainable alternative to

[61] *Renewable energy – powering a safer future.* Official website of United Nations, Climate Action. Visited in 23.07.23. Online available at: <https://www.un.org/en/climatechange/raising-ambition/renewable-energy>

[62] *Environmental Impacts of Wind-Energy Projects*. National Research Council. Washington, DC: The National Academies Press, 2007, pp.67-68. Online available at: <https://doi.org/10.17226/11935>

the harmful greenhouse gas emissions and pollution that come from fossil fuels. Also, as technology keeps making green energy sources easier to use, cheaper, and more efficient, it becomes more likely that climate change can be slowed down or stopped.

Article 194 of TFEU: When discussing the legal framework for renewable energies in the EU, the first fundamental element and key milestone is Article 194 of the TFEU, which establishes the objectives and principles of the EU's energy policy, including the promotion of energy efficiency and the use of renewable energy. In broad terms, the TFEU establishes the overarching legal framework not only for renewable and sustainable energy sources, but also the overall legal basis for the EU's energy policy. According to Article 194(2), actions taken to achieve the objectives of EU energy policy' shall not impact a Member State's ability to set the conditions for utilising its energy resources, its choice between different energy sources, and the basic structure of its energy supply[63].The application of primary EU law to the energy industry may be traced back to 1964, although it was first incidental and occurred within the framework of a specific energy-related case. Subsequent occurrences of single-case clusters ensued. During the 1980s, the Court of Justice of the European Union (CJEU) examined the initial instances concerning the relevance of free movement regulations to the energy industry. The Court of Justice affirmed that the regulations outlined in the Treaty on the unrestricted movement of individuals also extend to the energy industry. However, the Court also acknowledged that Member States could deviate from these regulations in order to safeguard public security.[64]

Renewable Energy Directive (RED): Since the 1970s, particularly after experiencing oil shocks and their consequences, the idea of developing alternative energy resources and becoming the world's first zero carbon emission location, or so-called “Green Europe”, has been the main foundation and focus of the EU[65]. As also mentioned above, with the commencement of the "Third Conference of the Parties to the United Nations Framework Convention on Climate Change" in Kyoto in December 1997, the topic of climate change has once again gained prominence in international discussions, marking 5 years after the significant Rio Conference. The EU recognised

[63] Article 194(2) TFEU

[64] HUHTA, K. The Scope Of State Sovereignty Under Article 194(2) TFEU And The Evolution Of EU Competences In The Energy Sector. *International & Comparative Law Quarterly*. Volume 70(4), 2021, pp.991-1010.

[65] LENSCHOW, A.; SPRUNGK, C. *The Myth of a Green Europe*. The Author(s) Journal, JCMS 2010 Volume 48. Number 1. pp.134

the imperative nature and importance of addressing the climate change issue in global sense. Furthermore, at the conference, the UN adopted a diplomatic position that set forth a target of achieving a 15% decrease in greenhouse gas emissions for developed countries by the year 2010, in comparison to the emission levels recorded in 1990. To facilitate the achievement of this objective, the Commission outlined a series of energy measures in its communication on the Energy Dimension of Climate Change[66], one of which highlighted the substantial promotion of renewable energy sources. The document provided a comprehensive action plan and guidance for the European Union community about the advancement of renewable energy and the implementation of targets set by the Member States.

As mentioned briefly in the previous chapter, the approval of the Renewable Energy Directives was the next important step in building the legal framework. They are regarded as a major pieces of secondary EU law pertaining to renewable energy regulation. This document establishes the procedures required to achieve legally enforceable targets for the proportion of renewable energy in the EU's overall energy consumption. Several changes have been made to this directive over the years. Renewable energy 2001/77/EC[67] and the Biofuels Directive 2003/30/EC[68] were key to the European Union's plan to use more renewable energy. The Renewable power Directive pushed EU member states to make more power from renewable sources, while the Biofuels Directive urged for the use of biofuels in transportation. Member states had to set goals and meet environmental standards for issues like reducing greenhouse gas emissions, protecting biodiversity, and how land utilised. Both guidelines helped the EU move towards an energy and transport system that is sustainable and low in carbon emissions.

The Renewable Energy Directive 2009/28/EC[69], which was enacted through a joint agreement on 23 April 2009 (repealing Directives 2001/77/EC and 2003/30/EC), stipulated that a compulsory 20% portion of the EU’s energy consumption be derived from renewable energy sources

[66] The Energy Dimension Of Climate Change, 1997. Official website of EU. Online available at: <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:51997DC0196&from=GA>

[67] Renewable Energy Directive 2001/77/EC. Official Journal of the European Communities. Online available at: <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32001L0077>

[68] Biofuels Directive 2003/30/EC.Official Journal of the European Communities. Online available at: <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32003L0030>

[69] Renewable Energy Directive 2009/28/EC. Official Journal of the European Communities. Online available at: <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32009L0028>

by the year 2020. The directive mandated that all Member States procure 10% of their transport fuels from renewable sources. It also outlined several strategies that Member States could employ to achieve their targets, including support schemes, guarantees of origin, collaborative projects, and partnerships between Member States and third countries. Additionally, the directive established sustainability criteria for biofuels. The directive, up until the year 2020, reaffirmed the preexisting renewable energy targets set by individual countries, which were determined based on their respective starting points and overall potential for renewable energy. These targets ranged from 10% in Malta to 49% in Sweden in terms of the share of renewable energy sources. Each member state of the EU delineated its strategy for achieving its specific target and outlined the overall framework for its renewable energy policy through the formulation of a national renewable energy action plan. The assessment of progress towards the national targets occurred biennially through the publication of national renewable energy progress reports by EU member states. The Directive 2001/77/E, among other things, set forth a target of 20% for the proportion of energy derived from renewable sources in the EU's collectively final energy consumption by 2020. In the subsequent Directive 2009/28/EC, this target was increased to 32% with the completion of 2030.

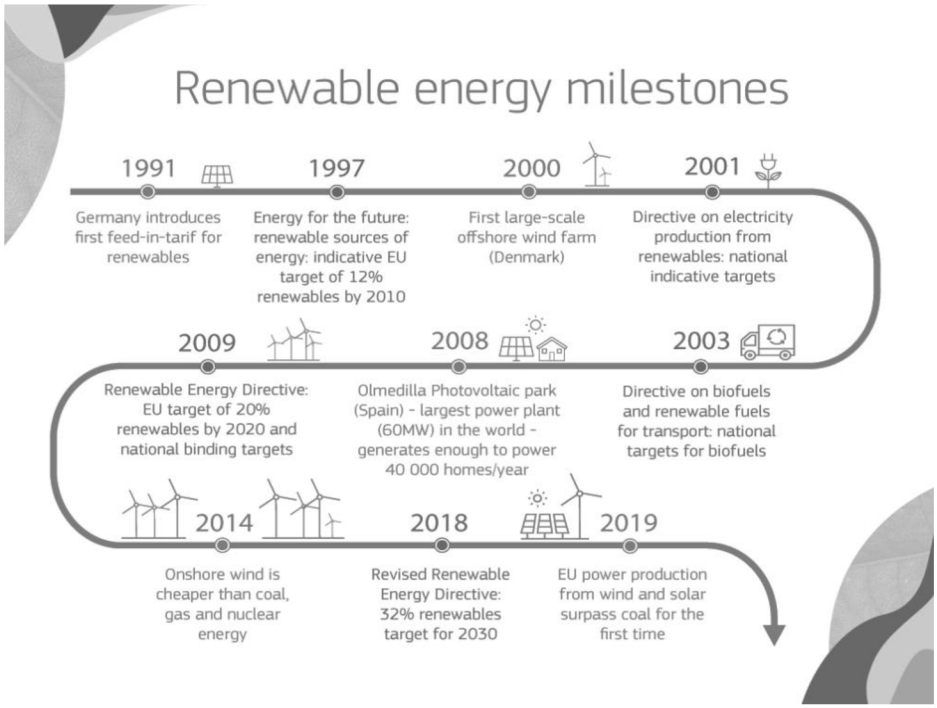


Figure 4. Fundamental milestones of EU Renewable Energy[70]

Following its revision in December 2018, the 2009 directive was integrated into the Clean Energy for All Europeans bundle. The proposal entailed the establishment of an innovative, enforceable objective on renewable energy, which is scheduled to be accomplished no later than 2030, with a minimum threshold as mentioned above of 32%, with a possible increase. Furthermore, a provision has been added that allows for the possibility of increasing this objective by 2023.

On January 15, 2020, a resolution was adopted about the European Green Deal, emphasising the urgent need for intensified efforts to address climate change and achieve environmental objectives. The statement underlined the significance of energy in transitioning towards an economy characterised by net-zero greenhouse gas emissions, with a specific emphasis on the criticality of decarbonizing the energy sector[71].

State Aid Guidelines: One of the EU's most important legal frameworks for energy and environmental protection is the State Aid Guidelines. Through the creation of the legislative framework that regulates the distribution of financing to renewable energy projects, they ensure that the requirements of EU competition and anti-trust laws are followed throughout the EU by the Member States. As per Article 107 par. 1 of the TFEU of the EU, any aid provided by a Member State that impacts trade between Member States or changes the way competition functions is considered to be in violation of the Treaties. Such types of state-provided funds are strongly banned because they interfere with the single market. The TFEU and guidelines specify all of the limitations[72].

Legislation concerning EU State Aid was last changed significantly in 2014, which is only a few years ago. From 2005 to 2009, the reform modified the guidelines and rules that the previous reform had established. In its Communication on State Aid Modernization from May 8, 2012, the Commission laid out a plan to change the way State Aid is granted. From the Commission's Programme, we can figure out that the reform will mainly achieve three things: enhancing the internal market to promote long-term growth, focusing enforcement efforts on cases that have the

[70] *In focus: Renewable energy in Europe*. Official website of the Commission of the European Union. Online available at: <https://commission.europa.eu/news/focus-renewable-energy-europe-2020-03-18_en>
[71] *Briefing- Renewable Energy Directive Revision of Directive (EU) 2018/2001*. Official website of European Parliament. Online available at: <https://euagenda.eu/upload/publications/eprs-bri2021662619-en.pdf>
[72] Article 107 par. 1 of the TFEU

biggest effects on the market, and making sure that regulations are most apparent so that decisions can be performed more quickly[73]. In addition, for State Aid regulation to have the most effect, it should focus on policies that support long-term growth, contribute to balancing finances, limit unfair business practises, and protect the single market. On January 17, 2013, the European Parliament passed a resolution called Modernization of State Aid[74]. This motion gave the project and its objectives a lot of support[75].

National Renewable Energy Action Plans (NREAPs): Each Member State within the jurisdiction of the European Union is hereby mandated to prepare and submit a NREAP in accordance with the relevant laws and required regulations. The plan delineates the strategic blueprint by which the member state aims to achieve its designated renewable energy objectives and contribute to the collective targets of the EU in attaining its overarching goals. The growth of renewable energy in each member state shall be determined in accordance with the aforementioned measures. In order to be eligible for and benefit from State Aid Program from the EU, it is imperative that national plans are linked to and prepared for State Aid requirements. As an example, in order to support member states in ensuring a transition to green energies, on April 4, 2023, the European Commission published updated State Aid guiding templates, as mentioned above, in order to help them to develop the measures that will be incorporated into their national Recovery and Resilience Plans (RRPs). The updated technical documents help Member States come up with steps that move the green transition outlined in the REPowerEU Plan forward. They also help end Russia's reliance on fossil fuels and make sure the European Green Deal is carried out successfully.[76]

Considering the comprehensive analysis of the EU Renewable Energy legal framework, it is obvious that the EU diligently upholds a consistent and accurate programme concerning the execution of strategic measures in the establishment of a legislative base. The perpetual and

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[73] NESLEN, A. *The new EU state aid law is 'a huge mess' say lawyers.* April, 2014. Online available at: <http://www.euractiv.com/sections/energy/new-eu-state-aid-law-huge-mess-say-lawyers-301805>

[74]State Aid Modernisation (SAM). Official website of the European Commission. Online available at: <https://competition-policy.ec.europa.eu/state-aid/legislation/modernisation_en>

[75] JANASZEK, P. *The Reform of EU State Aid Law - The environmental and energy sector and the role of renewable energy.* pp. 2-3

[76] State aid: Commission updates guidance for measures to support the green transition. Press release of the European Commission. April, 2023, Online available at: <https://ec.europa.eu/commission/presscorner/detail/en/ip_23_2090>

persistent evolution of normative acts is a direct consequence of political, financial, social, and cultural fluctuations or dynamics. Additionally, ongoing growth and complicated negotiations on the set-up of a legal framework for renewable energy sources, as well as the global political scene, have become less predictable due to events that were not expected. During this period, the process of organising national governmental forces and enacting legislation was not without obstacles. In a spotlight on the aforementioned facts, the following vital questions must be examined:

- *How was the EU able to coordinate and collaborate on the development of the renewable energy legal framework and related acts within the last decade?*
- *While there were more changes and uncertainties in power supply and demand, a shift in the EU's reliance on oil and gas sources, and unexpected events such as pandemics, wars, sanctions, and other events that occurred, how did they impact the achievement of national targets?*
- *What changes could be made to the current policies regulating renewable energy?*

The subsequent chapter will provide a comprehensive analysis and shed light on the answers to these questions.

I.IV. THE TRANSITION TO RENEWABLE ENERGY RESOURCES IN THE CONTEXT OF LIMITED HYDROCARBON RESOURCES AND POLITICAL CHALLENGES

Summary

Sub-chapter I. IV of the research challenges current obstacles faced by local jurisdictions as they strive to align their national laws with European standards. The section highlights the legal and political issues that can impede a smooth transition, emphasizing the significant influence of the EU on a global scale, particularly in third-world countries. As the harmonisation process is affected by petrol price fluctuations, decreased investor interest in renewable energy projects, and bureaucratic problems within governmental structures, it also discusses various complexities caused by the events like the COVID-19 pandemic and geopolitical tensions like wars.

The evolution of the legal framework for renewable energy in the EU during the last decade has been influenced by a range of factors, including legislative measures, organizational structures for governance, institutional collaboration, contributions from stakeholders, and systems for enforcing approved regulations while monitoring their effectiveness. As explored in previous chapters, the legal framework for renewable sources includes a range of legal instruments such as directives, strategies, packages, guidelines, and other relevant measures. Each of the normative legal acts listed carries its own set of requirements and implementation mechanisms that must be complied with, observed, and fulfilled by the Member States. During the process of harmonizing their national laws with European standards, local jurisdictions may encounter legal and political obstacles that can delay a successful transition. Even though such obstacles exist, collaborative efforts and structured solidarity in this geography have allowed the EU to make substantial advancements towards its renewable energy and climate goals. While establishing collaboration and partnership, the EU not only achieved targets among its member nations but also influenced the global transition and advancement of third-world countries.

The EU receives the vast majority of its oil, natural gas, and coal supplies from Russia. Even before the COVID-19 pandemic hit, prices for fossil fuels had already skyrocketed dramatically. The ongoing crisis between Europe and Russia is critically affecting the level of prices throughout Europe and bringing a new page to the fossil fuel usage era. It is necessary for the EU to investigate ways to strengthen its energy independence, making use of a number of the Green Deal's fundamental components. To attain climate neutrality in Europe by 2050, a shift in the direction of energy

production and consumption within the EU is essential, as per the European Green Deal. Energy production and consumption across economic sectors are responsible for more than 75% of the greenhouse gas emissions in the European Union. At the moment, fossil fuels provide electricity to approximately 75% of the energy infrastructure in the EU. Oil dominates the energy composition of the EU, accounting for 34.8% of the total. Natural gas and coal follow with 23.8% and 13.6%, respectively. Despite witnessing a gradual increase, the contribution of renewable energy sources continues to be comparatively modest, at 13.9 percent, in contrast to the 12.6 percent made by nuclear energy.[77]Given the preceding information, it is more appropriate to emphasise the principal legal obstacles in the harmonisation process:

- Despite the significant advancements in the renewable energy sector, which has been a primary focus of the EU's energy security, it is important to acknowledge that fossil fuels, particularly oil and gas, continue to dominate the energy supply landscape rather than renewable sources.

  The Russian invasion of Ukraine in February 2022 led the EU to reduce its heavy reliance on Russian gas and increase supply diversity. In addition to that, existing renewable energy targets and outcomes are insufficient to meet the EU end consumer's current market demand. As previously stated, existing renewable energy policies are not always successfully implemented by member states due to a lack of comprehensive and skilled personnel on government or management levels. In addition, non-harmonised national legislation and its transition often necessitate lengthy procedures. As a result, the EU currently has a higher demand for oil and gas supplies, which can be traced back to its partnership with the countries that supply hydrocarbon products. From a statistical point of view, The United States (13.6%), Norway (13.7%), Kazakhstan (10.2%), and Saudi Arabia (9%) are, in list of the top five oil suppliers of the EU. Additionally, Libya's share of crude supplies has increased to 8.1%, making it also an essential partner. Additionally, the volume of products imported by Norway increased by 6.2%, elevating its position as the leading natural gas producer to the EU at 44.3% of the overall total[78]. Another important gas supplier, which is the main focus of this research, is the Republic

[77] TAGLIAPIETRA, S. *The geopolitics of energy in Europe: Short-term and long-term issues.* Pressed by Papeles de Energie, June 2022, N. 17, pp. 94-95

[78] Jones, M. G. EU slashed imports of Russian energy in second quarter of 2023 - Eurostat. *Euronews*. 2023, September. Online available at: <https://www.euronews.com/my-europe/2023/09/25/eu-slashed-imports-of-russian-energy-in-second-quarter-of-2023-eurostat>

of Azerbaijan. As an example, the EU signed a new gas deal with Azerbaijan in July 2022. Furthermore, the target for the country on the border between Europe and Asia was to double the amount of gas it sent to the European Union by 2027. The goal is to have a minimum annual volume of 20 billion cubic metres, which is a big increase from the 8 billion cubic metres that were reported in 2021. The replacement would only affect a small portion of Russian goods, which used to make up about 45% of European imports[79]. Based on the presented import statistics, it is indisputable that the demand for oil and gas products remains substantial.

- From an investment standpoint, it has been observed that the majority of long-term contracts have been signed with major oil companies, primarily due to their strong reliance on fossil fuels. This has diminished the attractiveness of exploring renewable energy sources for market participants.

  The EU is facing further obstacles in its efforts to achieve climate objectives as a result of the energy crisis. The REPowerEU initiative increased the target percentage of renewable energy sources by 2030 from 40% to 45%. In 2022, however, major oil companies generated enormous profits from the sale of fossil fuels and consequently reduced their renewable energy goals. Therefore, LNG terminals and additional fossil fuel extraction require time to recoup their initial investment costs[80].

- There is an excessive amount of bureaucracy both within and between the governmental authorities and official bodies of Member States.

  As was mentioned earlier, the national jurisdiction needs to be modified and developed in order to benefit from the policies, strategies, and state aid of the EU, as well as to accelerate the process of harmonising national law to the specifications of the European Union (EU). On the other hand, such a mechanism doesn't occur with relative ease. In order to prepare the blueprint for the legislative amendment projects or development plans to be finalised

[79] EU signs deal with Azerbaijan to double gas imports by 2027. 2022, July 18. *Reuters*. Online available at: <https://www.reuters.com/business/energy/eu-signs-deal-with-azerbaijan-double-gas-imports-by-2027-2022-07-18/>

[80] *Four challenges of the energy crisis for the EU's strategic autonomy.* Think Tank | Briefing by the European Parliament. Online available at: < https://www.europarl.europa.eu/thinktank/en/document/EPRS_BRI(2023)747099>

and submitted for execution by the legislative body of Member States, it is necessary for it to be reviewed by a number of authorities. Competition and bureaucracy between such authorities can sometimes cause delays in the achievement of predetermined goals, such as unity. In addition, obtaining the appropriate licences and permits is essential in order to run renewable energy operations and make use of or manufacture energy products. Even on the national level, the majority of member states still have procedures that are difficult to follow in order to obtain those documents.

- Uncertainty in the Renewable Energy market.

  Because of the unfamiliarity with the new innovative field at the EU and national levels, it is critical to properly set the legal milestones. However, having a strong legal framework from the perspectives of investment law and contract law requires a significant amount of modifications, assurances, guarantees and equilibrium. However, because of consistent changes in government policies and regulations, the presentation of new policies and regulations, which is usually influenced by shifts in political leadership or arena, can create uncertainty and unattractiveness in the renewable energy sector. Thus, long-term investments in renewable energy projects may be discouraged as a result of this inconsistency.

CHAPTER II. THE REPUBLIC OF AZERBAIJAN AS AN ENERGY SUPPLIER IN THE INTERNATIONAL ENERGY MARKET. THE SIGNIFICANCE OF CARBOHYDRATE SOURCES IN THE REPUBLIC OF AZERBAIJAN'S INTERGOVERNMENTAL GEOPOLITICAL AND LEGAL RELATIONS.

II.I. ENERGY RESOURCES OF THE REPUBLIC OF AZERBAIJAN: LEGISLATIVE FRAMEWORK AND ENERGY DIPLOMACY (INTRODUCTION, REVOLUTION, IMPORTANCE OF AZERBAIJANI OIL IN CASPIAN SEA)

Summary

This subchapter analyses the energy regulatory landscape and the development dynamics of the Republic of Azerbaijan. It investigates the country's legislative framework and energy diplomacy, beginning with a discussing of the revolutionary changes in the energy sector. The section also discusses resources in the Caspian Sea, progress in determining its legal status and its importance in implementing the EU's energy strategies in this region. Furthermore, Russia's superior influence in the Caucasus region has also been reviewed. The post-USSR evolution of Azerbaijan's legislative framework is examined to understand the legislative system that govern the country's energy resources.

Historical background of the energy diplomacy in Azerbaijan

Modern energy security issues have multiplied in terms of their characteristics and can be studied from a range of viewpoints (philosophical, economic, political, sociological, psychological, legal, cultural, and so on). Studying the scientific, legal, as well political aspects of issues and challenges, allows us to clarify their nature, define their normative base, and design their complex implementation. International energy security is achieved through universal, regional, and bilateral agreements, cooperation and settlements.

Ensuring international energy security is an important aspect of bilateral and multilateral cooperation and a major challenge in contemporary international relations. It is no coincidence that a maritime safety strategy has emerged as a result of Azerbaijan's large-scale oil production within its territory in the Caspian Sea. Emergency for such a strategy mainly arose due to the existence of disagreements among coastal countries regarding the legal status of the sea, the growing

militarization of the water basin, the illegal transportation of drugs and weapons through almost all sectors, and the escalation of the region's ecological problems. The Republic of Azerbaijan, as the first of five Caspian governments, has prepared and developed the mentioned strategy, which was followed by other governments to develop similar approach. Kazakhstan and Turkmenistan were unable to export their energy resources to Western markets at profitable margins without the participation of Azerbaijan, even though there were alternative ways through Russian territory. Consequently, these issues have prompted other governments to clarify the division of the Caspian Sea into the sectors and to identify responsibilities. The strategy identifies Azerbaijan's interests in the Caspian Sea, the factors contributing to the maritime environment, internal and external threats, and the responsibilities of maritime security institutions. The legal foundation for the implementation of the strategy includes the Constitution of the Republic of Azerbaijan, the country's national security concept, its military doctrine, and its maritime security strategy, which are the key documents that define the legal and conceptual aspects of the country.

Since the early ages, this region has always been the competition object among dominating empires. Competition between global powers for this strategically important region had a direct effect on regional security. American politician Z. Bjezinski notes that "the Southern Caucasus is the focus of world politics and leading actors of international relations, but that the region cannot be rescued from internal conflicts…". The author states that the region had previously been only part of the control of the Russian Empire, however, it is now made up of three independent states which are Georgia, Azerbaijan and Armenia. The region has traditionally been the focal point of a political conflict between Russia, Turkey, and Iran. During the post-Soviet era, intense competition for the sharing of the Caspian Sea's energy resources coexisted with long-standing conflicts [81].

Russia has particular interests in the Southern Caucasus due to its specific political factors. First, it is important to note that the entire North Caucasus is part of the Russian Federation, allowing it to participate in the majority of processes as a regional state. Second, Russia is interested in participating in the projects carried out in the region which has the potential to impact regional diplomacy dynamics.

The Azerbaijani oil industry has an ancient history and has undergone various stages of

[81] BRZEZINSKI, Z. A Geostrategy for Eurasia. Foreign Affairs, vol. 76, no. 5, 1997, pp. 50–64. JSTOR. Online available at: <https://doi.org/10.2307/20048199>

development. As is commonly known, the Absheron Peninsula supplied the Russian Empire with nearly all of its oil[82]. However, drastic development of the Azerbaijani oil industry began in the 1970s. In 1872, Azerbaijan produced 2.4 million tons of oil, whereas in 1894 it reached to 5.8 million tons, and reached 12.2 million tons in 1901[83]. Throughout the Soviet era, Azerbaijan remained one of the nation's most important oil centres. During the war, the USSR produced 110 million tonnes of oil, which accounted for 75 million tonnes of Azerbaijan's production[84]. Oil production continued in Azerbaijan after WWII, though it has decreased slightly since the late 1970s. Therefore, Azerbaijan produced 11.9 million tonnes of oil in 1946. Soon after, production rose to 17.8 million tonnes in 1960 and 20.1 million tonnes in 1970. However, in 1980, production fell to 13.0 million tonnes and in 1990, again to 9.9 million tonnes.[85.] On the one hand, the decline was associated with the disintegration of the Soviet empire, and it was closely linked with the growth of oil production in eastern Siberia.

In 1991, Azerbaijan's production increased by 11.7 million tonnes, but since then, it has steadily declined, reaching a low of 10.3 million tonnes in 1993. The getting older of the existing infrastructure and equipment, as well as the challenges of the period of transition from the planned economy to the market economy, were the primary causes of the decline in production[86]. In 1994, the oil industry in Azerbaijan entered a new era of evolution and growth. International cooperation has reached a new level to attract investment and cutting-edge technologies to develop this sector. On September 20, 1994, an agreement on the joint development of the Azeri, Chirag, and Gunashli fields in the Azerbaijani sector of the Caspian Sea was signed in Baku after negotiations with the world's leading oil and gas companies. In 2010, there was a noticeable increase in natural gas production. This progress was due to the discovery of a natural gas field in the Azerbaijani sectors of the Caspian Sea.

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[82] GACHAYEV, S. *Azerbaijan-China relations in the background of Azerbaijan's oil and gas sector*. Azertac Press, 2021. Online available at: <https://azertag.az/en/xeber/azerbaijan_china_relations_in_background_of_azerbaijans_oil_and_gas_sector-1779183>

[83] MEGRE, *V. Rodovaya kniga*. January 1, 2015 (Russian edition), pp.62-67

[84] TAGIYEVA, T. *Current Problems in Modern International Relations*. BDU Publication,Baku, 2007, pp. 13

[85] Maritime Safety Strategy of the Republic of Azerbaijan/ Electronic Resources: http://www.president.az/articles/9290

[86] *Azerbaijan Republic-Recent Economic Developments.* International Monetary Fund, December 1995, IMF Staff Country Report No. 95/119, pp.7-8

The consortium, which was founded on June 4, 1996, is liable for the exploration and implementation of the Shah Deniz field. The consortium was formed by the State Oil Company of the Republic of Azerbaijan, BP of the United Kingdom, Statoil of Norway, Lukoil of Russia, Elf Akiten of France, OEC of Iran, and TPAO of Turkey[87]. The legal framework established by this consortium exemplified a fresh start for oil contracts in the region and would serve as a template for future deals. Production Share Agreement served as the legal basis for this agreement.

The discovery of two more natural gas fields in Azerbaijan's portion of the Caspian Sea has significantly expanded the country's energy options. 200 billion cubic metres of natural gas and 30–40 million tonnes of condensation were found in the Umid field in 2010[88.] In addition, the collaboration between SOCAR and Total has benefited the Absheron field. Initial estimates indicate that the oilfield contains 350 billion cubic metres of natural gas and 45 million tonnes of condensate[89.] Work is also ongoing on the Babakh field, which is expected to contain large quantities of carbohydrates. All of this demonstrates that Azerbaijan has numerous opportunities to ensure Europe's energy security.

Exports of Azerbaijani carbohydrates represent a significant milestone in the country's oil strategy implementation. The structure of petroleum pipelines intended to export energy carriers produced in the Country plays a significant role in expanding the Eurasian transportation system, while also contributing to the energy security of western nations and Europe. The intense location of oil and gas resources in the Middle East, Russia, and South America, as well as the growing demand for oil and gas production in the world, is not only a threat to the energy security of the EU, but also a factor in the depletion of these resources in European nations such as Norway, the Netherlands, and Denmark. In addition to all of these significant problems with Europe's energy security is the fact that majority of the EU member states want to solve all of these issues for their national interests, as mentioned in the preceding chapter. As a complex issue, the harmonisation of national legislation with the EU's renewable strategies is a priority. In this direction, mentioned

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[87] *Shah Deniz 25th anniversary in facts.* Official website of BP. Online available at: < https://www.bp.com/en_az/azerbaijan/home/who-we-are/operationsprojects/shahdeniz/Shah-Deniz-25th-anniversary-in-facts.html>

[88] SHABAN, I. *Gas Production at Umid Field to Exceed 960 MCM in 2020 – SOCAR. 2020.* Online available at: <http://caspianbarrel.org/en/2020/02/gas-production-at-umid-field-to-exceed-960-mcm-in-2020-socar/>

[89] *Absheron field.* Official website of State Oil Company of Azerbaijan Republic. Online available at: <https://www.socar.az/en/page/absheron>

states are not establishing a unified policy by expressing themselves jointly. The United States, Western European states, and Turkey, which were on the opposing side of the controversy over the export of Azerbaijan's hydrocarbon reserves, were interested in delivering oil and natural gas to buyers via westbound routes. Unquestionably, Azerbaijan's energy is important for minimalizing energy dependence on Russia by obtaining their energy carriers from alternative sources that are not under Russia's direct control[90].

Establishment of diplomatic ties with the EU in the energy field

As previously stated, the majority of Azerbaijan's oil exports are transferred via the Baku-Tbilisi-Ceyhan oil pipeline. The concept of constructing this route emerged in the early 1990s. In March 1993, in Ankara, Azerbaijan, and Turkey signed an agreement for the construction of the Baku-Tbilisi-Ceyhan oil pipeline, which marked the first step towards the implementation of this concept[91].

It is important to note that the EU only distributes circa 4% of the world's oil reserves and 2% of its natural gas supplies. Even though several oil, natural gas, and coal reserves discovered, they are unable to meet domestic demand[92.] This situation, along with the fact that Europe depends on Russia for oil and gas supplies, using the political situation, Russia often limits energy supplies to Western markets, and oil as a political tool against the West. The mentioned facts justify the primary reasons why the EU intensely work together with Azerbaijan in the energy sector. In turn, Azerbaijan takes part in EU energy-related projects and initiatives, which help to protect the energy security of the continent, especially when it comes to making sure that national laws are consistent with renewable energy sources.

On December 16-17, 1991, the European Energy Charter was signed at The Hague Conference, which Azerbaijani representatives also attended. The countries that signed the charter acknowledged their sovereign rights over their respective energy resources, and they settled the

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[90] *Contract of Century.* Online available at: <https://azerbaijan.az/en/related-information/132>

[91] DARABADI, P. *Caucasus and the Caspian in the World History and the 21st Century Geopoli-tics* (Kavkaz i Kaspii v mirovoi istorii i geopolitika XXI veka). 2010, pp. 216

[92] TSYGANKOV, A.P. *Self and Other in International Relations Theory: Learning from Russian Civilizational Debates.* International Studies Review 10, no. 4 (2008), pp.590.

objective of establishing an efficient energy market in Europe. The agreement was vital to the development of energy cooperation between Azerbaijan and European nations. It stipulates issues such as the sovereignty of countries over their energy resources, their extraction, production, access to market, transit, and so on[93.]

A Memorandum of Understanding on Strategic Cooperation was signed between Azerbaijan and the European Union on November 7, 2006, in Brussels by Azerbaijani Prime Minister Ilham Aliyev and European Commission President Jose M. Barroso[94] which will be discussed in mored details in following chapters. This document's primary objective was to progress the Azerbaijan for integrating into the energy markets of the EU, to expand the narrative of energy carriers from the Caspian Sea, and to legitimise the energy security of the EU. The favourable geographical and strategic location, rich natural resources, its location on the ancient Silk Road, and its intersection of important transportation gates have greatly increased the importance of the Caspian.[95]

Settlement of the legal status of the Caspian Sea

Generally, Caspian coastal countries have been under great interest point throughout history. This is because of their location in the very heart of the important geography. The name Caspian appears for the first time on Assyrian clay tablets from the 9th century B.C.E as Great East Sea[96]. Miletus Hekatey, an ancient Greek geographer and historian, referred to the Caspian as "the Treasure as the Gulf of the Ocean and the Sea of Hirkan" between the sixth and fifth centuries B.C.E. Greek explorers, considered all seas besides the Mediterranean to be closed reservoirs, including the Caspian Sea. Aristotle, an ancient scholar, also defended the notion that Caspian was an enclosed water pool[97]. In the fourth century B.C.E., Alexander the Great of Macedonia sent Patrcole

[93] GADJIEV, C.E. Geopolitics Caucasus. (Majdunardine onnoshenia) 2003, pp. 41-106

[94] *Relations between Azerbaijan and the European Union*. Official website of Ministry of Foreign Affairs of the Republic of Azerbaijan. Online available at: <https://mfa.gov.az/en/category/regional-organisations/relations-between-azerbaijan-and-european-union>

[95] SHAHMURADOV, A. *About the North-South Transport Corridor* (Azerbaijani edition: *Shimal-Djanub naqliyyat dahlizi haqqinda*), 2011, No. 2, Baku. pp. 30

[96] Etymology of the Caspian. Official website of the Republic of Azerbaijan. Online available at: <https://azerbaijan.az/en/related-information/234>

[97] *Hidden Europe 56 / Drawing A Line In The Water: The Caspian Sea*. Online available at: < https://www.hiddeneurope.eu/drawing-a-line-in-the-water-the-caspian-sea>

to study the coasts of the Caspian[98]. Arab explorers and geographers also mention Caspian in their manuscripts. The Great Silk Road's lines divided the southern Caspian Sea, crossing Azerbaijan's territory and heading for Europe.

The 1940 Treaty between the USSR and Iran stated: "... The Caspian Sea, considered by the parties of this agreement as the Soviet Union's and the Iranian Sea, is of particular interest to both sides". Thus, the Soviet Union and Iran's treaties have defined the use terms of the Caspian Sea, not the legal status of the Caspian Sea[99].

The determination of the legal status of the Caspian and its borders has not been solved yet. Whether being a sea or lake is also one of the most debated problems in the world, and there is no uniform approach. Such a situation makes it difficult for the final decision on the legal status of Caspian to be made. If it is recognized as a sea, then the division of the water area should be carried out under international conventions on the seas, and if it is recognized as a lake, then its status should be determined by the general agreement of the coastal states.

When addressing the issue of determining the legal status of Caspian in coastal countries, the first attention should be given to the Alma-Ata declaration signed by the former Soviet republics on December 21, 1991. The declaration states: "With the creation of the Union of Independent States, the Union of Soviet Socialist Republics ends its existence". In accordance with their constitutional procedures, member states are ensuring that international obligations arising from the treaties and agreements of the former Soviet Union are fulfilled[100]. Member States are obliged to comply unconditionally with the principles of this Declaration.[101]

Azerbaijan is the only country to include its maritime territory within its constitution. The Constitution's Article 11 states: "The territory of the Republic of Azerbaijan is unique, untouched, and undivided. The interior waters of the Republic of Azerbaijan, the section of the Caspian Sea (lake) in the Republic of Azerbaijan, and the airspace over the Republic of Azerbaijan are part of the territory of the Republic of Azerbaijan[102]." Each of the coastal countries' emphasis on their

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[98] ZONN, I.; KOSTIANOY, A.G; KOSAREV, A.N.T*he Caspian Sea Encyclopedia.* Springer, ISBN 978-3-642-11523-3, pp. 15-16

[99]New legal status of the Caspian Sea is the basis of regional cooperation and stability. *Perceptions- Journal Of International Affairs.* December 1997-February 1998. Volume II - Number 4, pp.5-6

[100]Protocol *to the Agreement establishing the Commonwealth of Independent States.* Alma-Ata, 21 December 1991*. Online available at: < https://www.venice.coe.int/webforms/documents/?pdf=CDL(1994)054-e>*

[101] VALIYEV, S. *Caspian, Science and Life*. Baku, 1977. No. 3, pp. 30-34

[102] Article 11 of the Constitution of the Republic of Azerbaijan

respective legal status of the Caspian Sea interests led to the emergence of disputes and conflict situations between them. The Azeri, Chirag, Gunashli, and Kapaz oil fields became a source of debate between Turkmenistan and Azerbaijan. Unquestionably, Turkmenistan's claims regarding oil fields are wholly unfounded. Because, firstly, fields are in the Azerbaijani sector of the Caspian Sea and, secondly, they were discovered by Azerbaijani oil producers.

Negotiations on the determination of the legal status of the Caspian Sea, which plays an important place in the relations between the five coastal states, have been going on for a long time. The Republic of Azerbaijan, which took an active part in this process, declared its interest in the distribution of the sea along the middle line, the same as existed during the USSR times, which directed its activities to the protection of peace and development of cooperation in the region. However opposite positions of all coastal countries did not allow the preparation of a final convention on the legal status of the Caspian Sea. This, in turn, prevents the creation of a general security environment in the region.

European perspective for further energy diplomacy

Every sovereign country implements administrative and legislative measures to ensure its economic and energy security. For instance, if energy infrastructure is in jeopardy, the transit country may implement restrictions on mass transit. Similarly, a government that accepts foreign assets during a breakdown of the currency-financial system to protect energy security may exercise its sovereign rights by nationalizing them (undoubtedly also compensating for the removal of foreign property). T. Walde, an energy law expert, points out that legal liberalisation does not mean that there will be genuine competition. Wider measures must be taken to achieve real competition in the context of the EU[103]. With continuous regulatory growth, the European Commission is expanding its scope with the liberalization of the energy market. The legal and regulatory division is deemed insufficient to prevent discrimination against third parties in this market. The concentration of both sales and transportation in a particular region poses an investment risk. Appropriate monopoly industries are also uninterested in equipment safety, as they have no

[103] WALDE, T; GUNST, A. International Energy Trade and Access to Energy Network. Journal of World Trade, 2002, vol.36, № 2, pp. 204

interest in upgrading existing infrastructure. The principle of liberalization in the international trade of energy resources is at the core of cooperation between the European Union and Azerbaijan, Central Asia (Kazakhstan, Turkmenistan), Uzbekistan, the Russian Federation, Latin America, and the Caribbean countries.

In most cases, the need for the implementation of the European law (including the Energy Charter Treaty (ECT)) is a priority in cooperation and partnership agreements between consumer countries, including the EU. For instance, Article 43 of the 1996 Agreement on Cooperation and Partnership between Azerbaijan and the EU, which also establishes energy cooperation (Article 55), states that the parties recognise that compatibility between the existing and future legislation of Azerbaijan and its harmonisation with EU legislation is an important condition for strengthening economic cooperation between the EU and the Azerbaijan[104]. Azerbaijan will strive to gradually associate its legislative framework with requirements set forth by EU Law. In recent years, more serious and effective mechanisms have been required to attract investment to international energy markets, especially for energy-exporting nations, such as post-Soviet states. In this regard, the new addendum to the ECT can address such concerns. Controversially, the current provisions of the ECT do not adequately address the security of supply and demand, nor do they adequately reflect the interests of energy-related nations.

The establishment of the United Nations signifies the beginning of global cooperation among international organisations in the energy field. Among the factors accelerating the formation and development of international energy law, the presence of international organizations in this field occupies an essential role. Examples of such organisations include the United Nations (UN) and its specialised agencies, such as the International Monetary Fund (IMF), the International Bank for Reconstruction and Development (IBRD), the International Financial Corporation (IFC), the Multilateral Agency for Investment Insurance (MIGA), the International Atomic Energy Agency (IAEA), and others.

Cooperation with the countries of the Southern Caucasus is mainly driven by the political and economic interests of the EU countries. Even though cooperating countries are not directly

[104] Article 43 and 55 of Azerbaijan - EC Cooperation Agreement (1996). International Investment Agreements Navigator | UNCTAD Investment Policy Hub. Online available at: < https://investmentpolicy.unctad.org/international-investment-agreements/treaties/treaties-with-investment-provisions/3143/azerbaijan---ec-cooperation-agreement-1996->

working on putting the regional security strategy into action, some of them have taken steps to show support primarily through NATO programmes. The rich oil reserves of Azerbaijan play an important role in the European continent's energy supply as well as in Azerbaijan's development and energy security. The signed agreements, as well as the oil and gas export margins, show that the importance of Azerbaijan to European countries is growing steadily. The inability of Western governments to delegitimize Azerbaijani oil corresponds to their political interests[105].

[105] JAROSIEWICZ, *A. Azerbaijan – a growing problem for the West*. OSW, Commentary, N. 146, Sep.2014, pp.1-2

II.II. UTILISATION OF CARBOHYDRATE RESOURCES: A MODERN ENERGY POLICY AND ENERGY SECURITY MECHANISM OF THE EUROPEAN UNION

Summary

The section is focused on modern energy policy of the European Union and examines key energy security targets in the EU's National Energy and Climate Plans for 2021–2030. This strategic planning sheds light on the EU's approach to energy security, with a particular emphasis on addressing concerns about energy dependence on Russia. The analysis suggests transitioning from traditional carbohydrate resources to modern renewable energy sources which is to be in line with EU law requirements.

The global challenge for energy resources in modern times is linked to the fact that energy supply is not evenly distributed on the planet's surface. It is no coincidence that M. Brooks, an English researcher, referred to oil as a "buying substance in world politics" and stated that "all the struggle in the world smells oil..."[106]. The role of oil in modern world politics is determined by its role in global energy supply. Western authors who objectively recognised the importance of oil in geography wrote that "the fate of our civilization is largely dependent on oil". It is impossible to thrive in a country that is not dependent on energy resources. Even giant economies such as Germany and Japan were the most vulnerable to the oil shortage during WWII. After the war, given that "oil does not recognize national borders[107]", the major source of world trade and more than half of the world's maritime transportation was attributed to oil and its transportation.

Energy security can be defined as the provision of adequate energy supplies for a country or the global community as a whole. The European Commission designates the concept of energy security as "the ability to provide accessible and stable external sources for energy needs". National Energy and Climate Plans for the period 2021 to 2030 (and each succeeding ten-year period) highlighted the following energy security statements:

(1) Global energy policies should be designed to ensure global, economic growth;

(2) Energy security should be one of the first priorities of foreign policy and the economy;

(3) Energy supplies and all transportation lines, especially pipelines and their security, should be

[106] MICHAEL, B. *Oil and foreign policy.* Published by Lawrence & Wishart, Jan. 1949, pp. 29-30

[107] MUMILTON, A. *Oil in big business* (the Russian edition: Neft v bolshoy biznese). Pragress, 1978, pp.35-36

ensured;

(4) Energy sources should be enhanced by governments and dependability balanced. If we make an overall assessment, we see the concept of energy security has a different meaning for states that export and import energy. As countries that own and produce energy are seeking demand diversity to ensure their economic growth, however importing countries with more energy consumers are following supply diversity.[108]

The main issue that was causing even more problems for the EU's energy security was that the gradual depletion of North Sea oil and gas reserves would make this geography more dependent on Russia and the Middle East. Furthermore, Russia's position was indeed strengthened by the continuation of an unstable political environment in the Middle East. As we discussed in the previous chapter, concerns about Europe's energy security in modern times arose as a result of the "oil embargo" imposed by the Arab States in the 1970s. This embargo has specifically highlighted three key issues:

First, the necessity and critical urgency for broader cooperation between European countries that export energy to Europe has emerged. Second, it became clear that special mechanisms were needed for broad coordination when Europe's future arrangements were reduced. Thirdly, there was consensus that Europe's self-government strategy should be developed in opposition to the use of energy as political weapons by exporting nations. The creation of the International Energy Agency in 1974, which became Europe's main tool for monitoring and analysing world energy markets, was one of the responses to the oil embargo. In addition, European countries were trying to achieve a diversity of provisions.[109]

Kazakhstan and Turkmenistan are also among the most important countries in Europe's energy supply. In this sense, Kazakhstan implements an export policy based on multiple routes. In particular, as the productivity of the Kashagan field increases, Kazakhstan needs to look for new pipelines for its oil export. These can be realized through three options: expanding the existing Caspian Pipe Consortium stretching from Russia to the Black Sea coast, supplying additional oil to

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[108] MANEVA, K.; RUZICKA, P. *Energy-related strategy and policy documents*. Online available at: <https://programme2014-20.interreg-central.eu/Content.Node/FIRECE-D.T.1.2.3-1.1-EU-energy-related-strategy-and-policy.pdf>

[109] AZIMOV, A. *European energy policy and the EU-Azerbaijani energy cooperation*. Journal of Comparative Politics, vol. 14, 2021, pp. 70-89

the BTC pipe, and exporting it to the East-China with a new oil pipeline which is currently under construction.

Transferring the energy resources from the Caspian region via the current north-south direction to the east-west direction towards Europe is one of the main goals of the EU's energy strategy. Currently, three major projects serve to decrease the region's dependence on Russia:

First, the Caspian Pipeline Consortium (CPC) project connects Kazakhstan's Caspian oil (Tengiz field) with the Russian port of Novorossiysk on the Black Sea[110]. Novorossiysk is a major loading point for tankers carrying oil to the Mediterranean Sea and eventually Western Europe. Transmission capacity was reached the 63.5 million tonnes in 2023[111].

The second is the oil pipeline connecting Baku, Tbilisi, and Ceyhan. The pipeline, started its functions in July 2006, carries oil from Baku to the Turkish port of Ceyhan on the Mediterranean coast.

The third is the "South Caucasus Gas Pipeline" (SCGCP), which was completed in December 2006 and runs parallel to the BTC pipeline until its connection to the energy facilities in located in Turkey, from where it is transported to Europe via Greece. This pipeline was built to transport part of the gas produced from the Shah Deniz field from Baku to Turkey.

The shortest pipeline project of the Southern Gas Corridor is considered to be the Trans-Adriatic Pipeline project. The project connects Europe with the Caspian and Central Asian oil fields and plays an important role in the diversification of gas supplies of Southern Europe. According to the project data, the pipeline starts from Thessaloniki near Greece, passes through the territory of Albania and the Adriatic Sea and ends near the Italian city of Brindisi. The length of the belt with the bottom of the sea is 115 km, and the maximum depth is 820 meters in the Adriatic Sea. Current annual gas circulation volume is 10 billion m^3, with an increase to 20 billion m^3 feasible. This pipeline stretches for 520 kilometres and cost 1.5 billion euros to build[112].

After lengthy and intense discussions, the European heads of state and government were

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[110] DELLECKER, *A. Caspian Pipeline Consortium, Bellwether of Russia's Investment Climate?*. Paris, 2008 ISBN, pp. 7-8

111 SEKONAVA, S. *Caspian Pipeline Consortium Transports Record 63.5 Million Tons of Oil in 2023*. Jan.2024. Online available at:< https://astanatimes.com/2024/01/caspian-pipeline-consortium-transports-record-63-5-million-tons-of-oil-in-2023/>

[112] ZOTO, R; MESHINI, M. *Trans-Ariatic pipeline project (TAP) in Albania: A potential opportunity for archaeology.* 2019, Internet Archaeology 51. Online available at: <https://doi.org/10.11141/ia.51.7>

able to adopt a future-oriented energy policy agenda to achieve Europe's primary energy objectives. As a result, the EU was able to implement a common approach to the energy issue and launched a common strategy supported by the United States to provide its member states with safe, competitive, and sustainable energy. One of the main issues is the interest of the EU countries in implementing individual energy policies.

Interest in hydrocarbons and other resources in the Caspian and Central Asia creates an incentive for the West to actively participate in the internal political life of the region. It is no coincidence that the famous American geopolitician Zbigniew Brzezinski called the region the main gateway to Central Asia, especially to the Caspian basin of Azerbaijan. He said: Azerbaijan can be called a "traffic jam" to enter the Caspian basin and the Central Asia.[113]Individually, Azerbaijan's neighbours are pursuing cooperation with the EU. It depends on a number of different factors. By gaining the support of the EU, which controls 90 percent of Western Europe's industrial and human potential, these states may be able to emerge strongly from Russian influence. On the other hand, European governments are heavily influenced by the interests of European nations. Agreements signed with the EU could create opportunities for states to be integrated into the "European House" institutions[114].

To ensure national energy independence and strengthen energy security, the development and enhancement of Azerbaijan's national energy legislation is extremely necessary, especially in terms of renewable resources. This necessity plays a leading and decisive role in the prosperity of regulating energy resources and the national economy. Such growth also manifests itself in the modernization of the oil and gas infrastructure, the improvement of environmental protection and the further rise of social welfare, as well as the growing geostrategic potential of Azerbaijan.

After Azerbaijan's national independence was regained, the prime time of the successful oil strategy began with the Contract of Century. Azerbaijan has undertaken numerous projects in various sectors (energy, transportation, education, culture, agriculture, regional development, economic, political, and institutional reforms, etc.) in cooperation with other organizations.

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[113] BRZEZINSKI, Z. *"Azerbaijan proved itself as a successful state"* (interview). Online available at: <https://azertag.az/en/xeber/zbigniew_brzezinski_azerbaijan_proved_itself_as_a_successful_state_quot-599051.>

[114] ATAKISHIYEV,M. *National Economic Development and Effective Rise Problems*. Online available at: <http://www.Azerbaijan-neüsşaz/indexşphp?mod=3andid=12170>

Relations with the EU led to harmonising national legislation, implementing reforms in the economic and political field, creating an East-Western transport-communication lobby, infrastructure development, etc. For developing cooperation in the economic domain, in the early years of the independence, relations with the European Central Bank (ECB) were developed under the framework of Technical Assistance for the Commonwealth of Independent States to MDB Countries (TACIS), European - Caucasus - Asian Transportation Authority (TRACECA), International Programme for the Transportation of Oil and Gas to Europe (INOGATE), European Civil Protection and Humanitarian Aid Operations (ECHO), and other programs[115].

For the ECB, Azerbaijan is strategically important in the region as well as in the framework of the European Neighbourhood Policy and Eastern Cooperation programs[116]. First, Azerbaijan is implementing extensive energy and transportation projects with energy companies in the ECHR and member countries. Second, Azerbaijan is one of the main countries in terms of Eastern and Western transportation concepts. Third, despite being an Islamic nation, Azerbaijan is open-minded and socially conscious[117] with a wide range of diversity of population. The transit location of the country in the region, situated between the intersection of Europe and Asia, together with its function as the transportation hub of Eurasia, are significant factors that attracted the ECB. The country's geological and geoeconomic characteristics facilitate the connection of transport and communication routes to Russia, Central Asia, Kazakhstan, Iran, Georgia, the Black Sea region, Iran, Turkey (through Nakhchivan), Russia, and Armenia. The country has been able to maintain an independent foreign policy course despite conflicts of interest from many foreign forces and countries in the Southern Caucasus, as well as conflicts in the region. This allows him to establish relations with the ECHR based on the country's national interests. [118]

One of the key agreements for the implementation of the ECHR's objectives with the Southern Caucasus states was the European Neighbourhood Policy which will be discussed in the next subchapter. In 2004, the Republic of Azerbaijan was included in the European Neighbourhood Policy Programme. Under the Programme, Azerbaijan has been able to implement many economic,

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[115] Article: *Azerbaijan – European Union.* Online available at: < https://republic.preslib.az/en_a7-3.html>
[116] KINTSURASHVILI, K; KRESIC, A. Azerbaijan Diagnostic. Published by EBRD, March, 2019, pp.6-7
[117] OMAROV, V. *Azerbaijan's world intelligence and Caspian oil*. Online available at: <http://sia.az/ru/-new fashion352500>
[118] HASANOV, A. *Azerbaijani energy supply and security policy /New Azerbaijan*, January 24,Baku, 2014, p. 4

political, legal, and administrative reforms and has received financial and technological support from the ECB[119].

[119] TAJYEVA, T. *Modern International relationships current problems*. Baku, BDU publication, 2007, pp. 160-162.

II.III. THE EUROPEAN NEIGHBORHOOD POLICY PROGRAMME IN THE CONTEXT OF NATIONAL LEGISLATIVE REFORMS

Summary

The paragraph explores the EU's neighbourhood program which is mainly focused on its southern and eastern countries who are not the Member States. Through the program, and its National Actional Plans which are prepared collaboratively with the Member States, the EU strengthens its position in the region, as well as boosting the diplomatic ties with such countries. Azerbaijan has also joined the program, which is further studied within the paragraph. In addition, legislative reforms and the continuous influence brought by MoU dated 7th November 2006 between the EU and Azerbaijan, were extensively analysed.

European Neighbourhood Policy Programme has been initiated to strengthen the relations with neighbouring regions, in particularly in the South and East in 2004. The scope of targeted cooperation with the ENP members is based on the following priorities:

(a) Stabilisation through economic development: the EU's primary strategy for establishing common values and goals with partner countries is to stabilise political relations through economic and administrative progress. Stabilisation is achieved through reciprocal means, involving reform and gradual harmonisation with the EU, to develop a strong partnership with neighboring regions.

(b) Security: cooperation on security-related initiatives includes counter-terrorism, radical extremism prevention, combating organised crime and narcotics transportation, conflict and war prevention, crisis management, and security sector reform. To ensure that ENP partners have the full potential to achieve the targets set, the EU provides administrative, advisory, and financial support to facilitate institutional and legislative reforms. Under the conflict and war prevention cluster, the EU actively supports international negotiations between neighbouring countries. There has been a recent increase in focus on emerging threats such as cyber-attacks and hybrid threats, as well as addressing the security implications of climate change.

(c) Migration and mobility. This cluster is dedicated to advancing the future integration processes that guarantee the unrestricted movement of citizens, goods, and capital. The Easter Partnership Framework places particular emphasis on addressing migration issues as a top priority. The main objective of this EPN cluster is to facilitate effortless movement within partner countries and the EU, as well as provide assistance to migrants and refugees. Furthermore, the administrative difficulties associated with visa facilitation are also a significant focus of international cooperation.

Given that each partner country has its own political strategy, not every participant adopts the same approach when cooperating within the EPN umbrella. One of the EU's guiding principles is differentiation between its neighbouring countries which is also called “political conditioning". Various forms of partnership have been established as common practice, such as Partnership Priorities, Association Agendas and other legal forms. Given that not all participants are willing to implement the policy's objectives due to political and diplomatic strategies, each country has individually prepared Action Plans that outline country-specific targets and legislative reforms. Geographical, political, social, and other elements of the country are taken into account when developing Action Plans, resulting in a successful and long-term relationship with the EU. Such Action Plans do not establish a legal basis with participating countries, merely formalizing intentions and progress directions of the parties[120]. ENP involves two regional clusters:

- **Southern neighbours**: Algeria, Egypt, Israel, Jordan, Lebanon, Libya, Morocco, Palestine, Syria and Tunisia.
- **Eastern neighbours**: Azerbaijan, Armenia, Belarus, Georgia, Moldova and Ukraine[121].

Being a main energy supplier in the South Caucasus, Azerbaijan was included in the ENP in 2004. It was an important step for the country to implement economic, social, and legislative reforms within the scope of ENP while receiving financial and administrative support from the EU. In terms of strengthening political ties with the EU, at that time main priority for Azerbaijan was the peaceful resolution of the “Karabakh” conflict, which was occupied by Armenia. Furthermore, Azerbaijan has also signed a Protocol that prolonged the term of the Partnership and Cooperation Agreement

[120] NADIYEVA, F. “The perspectives of foreign economic relations of Azerbaijan with EU”, 2016, Baku, pp.8-10.
[121] Official website of the EU, European Neighbourhood Policy.

between the EU and Azerbaijan which was signed in 1996. An Action Plan has been developed under the ENP with the assistance of collaborative working groups of Azerbaijan and the EU in various areas such as economic, political, social, and energy partnerships. The program was initiated based on the decree issued by the President of Azerbaijan in June 2005, which focused on establishing integration with the EU. The First Action Plan was approved in 2006 which covered various social reforms for the next five-year period. There were persistent progress dynamics in the implementation of the Action Plan, particularly in terms of macroeconomic stability and poverty reduction. Under the ENP objectives, Azerbaijan was encouraged to implement a variety of reforms in judicial, administrative, and legislative fields.

Since joining the policy, Azerbaijan has made significant efforts to combat corruption in the country, as well as to establish a transparent and fair administrative environment for citizens. In January 2004, the Milli Majlis (Parliament) approved the "Law on Combating Corruption"[122], which was followed by President Ilham Aliyev's "State Program on Combating Corruption" in September 2004. Furthermore, the government approved several strategies and action plans to ensure that the legislation on anti-bribery and corruption is implemented sustainably. Such strategies shared common interests with the ENP in achieving defined goals.

The government has implemented vital judicial reforms aimed to guarantee that the judiciary/legislative body has separate powers from the executive body in terms of finance, control, and independence. This was to ensure that the two branches of the judicial system do not correlate with one another during judicial proceedings or the execution of rulings. Increasing transparency and equity was specifically focused. The objective was to establish a fair and impartial system for distributing cases among judges, free from any biased factors. Additionally, efforts were made to strengthen the advocacy institution's competence to ensure effective public defence. Furthermore, strict monitoring plans have been also established for the supervision of the implementation of court decisions.

Shortly after joining the ENP, on the 14th of June 2005 with a collaborative partnership with the Council of Europe, the Azerbaijani government amended the “Law on Courts and Judges” intended to improve transparency and selection procedures for judges and their appointment to

[122] Law of the Republic of Azerbaijan “On combating corruption”. Online available at: < https://mia.gov.az/en/legislation/1/view/8/>;

courts[123]. The government mandated that judicial appointments be based on professional competence and judicial skills. The new method of selection included first-time multi-phase exams, with successful candidates progressing to the next stages. Mandatory courses for selected judges have been established, which are taught by prominent judges, lawyers, and representatives from international organisations who share their legal expertise with them. In February 2005, a new institution, the Judicial-Legal Council, was established as an independent and self-governing body. The council is made up of 15 members, the majority of whom are judges, representatives from other branches of government, legal academics, and lawyers. They are elected for five years by the majority of participants in the Conference of the Judges. The establishment of this Council has resulted in an independent and accountable approach to the judiciary branch, particularly in terms of continuous assessment of judges' performance, professional activities, disciplinary liability and assessment, promotion, etc[124].

As part of an ongoing development under the ENP, the EU has approved a financial allocation of 92 million euros to the government of Azerbaijan. This funding would be used to implement specific objectives outlined in the approved Action Plan[125]. The progress between the parties resulted in the signing of the Memorandum of Understanding between Azerbaijan and the EU.

Memorandum of Understanding on the Strategic Energy Partnership between the Republic of Azerbaijan and the EU (2006 and 2024).

As an essential part of the EU's external diplomatic relations and implementation of its policies, soft law occupies a crucial position within the EU law. Encompassing a wide range of contractual forms and types, and a broad structure of their terms and conditions, soft law instruments are extensively employed during bilateral and international agreements. Nevertheless, the growing utilization of soft law instruments in recent years has raised concerns of EU law scholars in terms of the conferral powers of the EU, the non-binding nature of the agreements and their

[123] Law of the Republic of Azerbaijan "On Courts and Judges". Online available at: < https://constcourt.gov.az/en/legislation/41>

[124] Official website of Judicial-Legal Council of the Republic of Azerbaijan. Online available at: < https://jlc.gov.az/en/judicial-legal-council/about>

[125]*Azerbaijan – European Union*. Presidential Library, 2016. Online available at: <https://republic.preslib.az/en_a7-3.html>

institutional balance in the context of the EU Law[126]. On the other hand, having an obligatory and imperative nature of legally binding hard law instruments such as international treaties which are to be ratified by the countries, sometimes resulting in long-lasting engagement, as well as political and strategic challenges between the participating parties.

Enhancing the strategic partnership with the energy-supplying countries, strengthening the energy security of the single market, as well as gradually decreasing the main dependence on carbohydrate resources while transitioning to green energy resources were the main objectives of the EU energy policies. Having mutual diplomatic interests with Azerbaijan, in particular, respective to the energy infrastructure, led the parties to a secure and progressive partnership. One of the fundamental initiatives within this partnership was the Memorandum of Understanding on the Strategic Energy Partnership between the Republic of Azerbaijan and the EU, signed on the 7th of November 2006, in Brussels. The MoU has defined several objectives which were merely focused on the achievement of similar objectives defined by ENP. At that time considering that Azerbaijan had a territorial conflict with Armenia, the EU was trying to peaceful settlement of the territorial disputes to eliminate threats and risks which could be obstacles for the strengthening the European energy security. As mentioned above, even though MoU being an element of soft law, lacked the legally binding force unlike formal treaties or directives, rather it was based on shared objectives, the goodwill of the parties and their mutual commitment to the defined targets. It merely served to accelerate the legislative reforms that were designed to align the regulatory governance of the country, particularly in energy governance and sustainability with the standards set forth by the EU law. Considering the diversity in the energy subsector of the partnership, the MoU[127] defined four focus areas:

1. *Gradual harmonisation of national legislation with the EU legislation:*

   The parties have agreed upon several legislative initiatives as part of the first objective. Furthermore, the objective includes several legislative reforms in areas such as electricity

[126] NOWROT, K. Aiding and Abetting in Theorizing the Increasing Softification of the International Normative Order—A Darker Legacy of Jessup's Transnational Law?. *The Many Lives of Transnational Law*. Cambridge University Press, 2020. pp. 105–125

[127] Memorandum of Understanding on the Strategic Energy Partnership between the Republic of Azerbaijan and the EU, 7th of November 2006. p. 5. Online available at: < https://www.europarl.europa.eu/meetdocs/2009_2014/documents/dsca/dv/dsca_20130321_14/dsca_20130321_14en.pdf>

tariffs, gas pricing, increasing energy efficiency, ensuring energy supply security, and optimising the energy mix in electricity generation. Furthermore, Azerbaijan committed to making its best efforts to meet the criteria of the electricity and gas directives of the EU, particularly in relation to electric and gas transmission operators. On the other hand, the EU undertook to provide Azerbaijan with progressive technical assistance to integrate into the EU energy market.

2. *Enhancing the safety and security of energy supplies and transit systems from Azerbaijan and the Caspian Sea basin:*

   In addition to energy supply routes to the EU, the second objective emphasised the importance of oil transfer from the Caspian Sea basin via Azerbaijan. In this regard, the parties agreed to establish a cooperation program aimed at developing hydrocarbon transit infrastructure, increasing the safety and security of the existing pipeline network, and promoting the harmonisation of not only the legislative framework but also technical norms and standards in Azerbaijan's hydrocarbon network with EU industrial practices, as well as applying EU environmental standards during oil and gas extraction, among other fundamental directions.

3. *Prioritizing the development of renewable energies, and climate change strategies and making use of all relevant mechanisms under the Kyoto Protocol:*

   The third objective prioritised the development of sustainable energy policies in Azerbaijan, which included demand management, energy tariff transparency, renewable energy resource development, and other UNFCCC objectives. Furthermore, the objective also directed and highlighted all related mechanisms under the Kyoto Protocol. Taking the aforementioned element into consideration, the EU guaranteed that Azerbaijan would be included in all future renewable energy programmes.

4. *Technical cooperation and exchange of experience:*

   The fourth objective covered cooperation on energy technology and the exchange of know-how through the promotion of investment, acquisition of technological skills, and twinning

the future of Azerbaijan regulatory bodies in the energy field with the EU ones.

Even though the MoU's stated objectives cover a broad range of energy security issues, it has brought up new horizons in all aspects of the partnership with the EU, particularly its support for Azerbaijan's harmonisation. Despite the agreement's non-binding nature, it played a crucial part in formulating regulatory governance and developing Azerbaijan's legislative system, as well as establishing a solid foundation for future cooperation.

On 18th July 2022, for the second time, a Memorandum of Understanding on Strategic Partnership in the field of energy was signed between Azerbaijan and the EU. The document has ensured the continuous partnership of the parties and, at the same time progressed as a vital response to the EU's energy supply issues, particularly in light of the gas shortages within the EU market as a result of the Russian-Ukrainan war. The agreement enables the EU to decrease dependence on Russia and, at the same time targets increasing the annual volume of gas imported from Azerbaijan through the Trans-Adriatic Pipeline (TAP) by up to two times within five years, until 2027[128]. Furthermore, following the REPowerEU plan, the EU highlighted the vitality of the Southern Gas Corridor in terms of diversification of natural gas supply. Another important direction of the agreement is the use of renewable energy sources for power generation, transmission, and consumption, considering that Azerbaijan has an outstanding capacity for contributing to the green energy strategies of the EU. As stated in earlier chapters, the Paris Agreement, adopted at the 21st conference of UNFCCC and signed by 171 countries, aims to establish shared goal for reducing carbon emissions on a global scale. As such, the objective to be attained in conferences of the Conference of the Parties (COP). The fact that Azerbaijan will host the COP 29 event in 2024 provides further evidence of its substantial contribution to the global renewable energy industry.

[128] Press release, European Commission: "*EU and Azerbaijan enhance bilateral relations, including energy cooperation*". Online available: < https://ec.europa.eu/commission/presscorner/detail/en/ip_22_4550>

II.IV. LEGAL ISSUES AFFECTING THE EU PROJECTS IN THE CAUCASIAN REPUBLICS. CASPIAN OIL UTILIZATION STRATEGIES

Summary

This section devoted to the legal concerns affecting EU initiatives in the Caucasus Republics. A focus point is the Baku-Tbilisi-Ceyhan oil pipeline, which has been operational since 2006 and is a large regional project with legal ramifications while having significant role on supplying Caspian Oil to the EU. Azerbaijan's participation in international treaties, such as the European Energy Charter, the 1994 Energy Charter, and etc. also demonstrates the legal framework that governs its energy activities. Furthermore, briefly examined Memorandum of Understanding on Strategic Cooperation in Energy, signed in 2006 by Azerbaijan and the European Union, is also assessed as a key legislative document guiding cooperation energy initiatives. The subchapter additionally provides contractual figures of major production share agreements, clarifying the legal relationships between participants of the region's energy projects.

An important source country to meet the EU's oil and natural gas needs is Norway over the North Sea. The ECB imports 28.2 per cent of its natural gas and about 15 percent of its oil from Norway. While there are no issues with oil and natural gas imports from Norway, which is part of the European continental system but is not a member of the alliance, the insistence of experts that North Sea energy sources will decline in the 2030s has increased EU member states' interest in alternative energy sources.[129]

The Southern Gas Corridor (SGC) system has been designed so that the transmission capacity of each of its segments, including TAP, can be expanded to accommodate potential future increases in gas volumes. In the future, Turkmenistan and Kazakhstan can use the infrastructure implemented to export their large gas resources to the European market. It is a unique project designed to benefit all countries on what stretches from the Caspian Sea to the centre of Europe[130]. The SGC is redrawing the entire region's energy map by exporting Caspian Sea gas resources directly to European markets for the first time. In contrast, natural gas will increase by 1.5% to 1.8% annually through 2040, making it the fastest-growing fuel type. Global gross natural gas exports will increase

[129] ASADOV, A.J. THE OIL AND GAS LAW REVIVEW. London, Law Business Research, 2013, pp.28

[130] OETTINGER, G. *Southern Gas Corridor is game changer for the EU.* Online available at: <https://azernews.az/oil_and_gas/145877.html>

by 50% at the time, and experts predict the European market will attract much of this growth, which will once again increase the importance of SGC infrastructure[131]. Signing a 15-year agreement with importing nations on the volumes of gas to be exported under the SGC is undoubtedly one of the most important factors elevating the project above its competitors. One of the main advantages of SGC compared to projects that are still under construction, with import market prospects uncertain, is that the project is approved by the ECB.[132]

The threat of oil and gas industry colonialism in post-Soviet Azerbaijan highlighted the need to revitalise the region. Following the country's independence, foreign investment has begun to be attracted to the development of Azerbaijan's oil industry. Thus, Azerbaijan and major oil companies signed an important agreement in 1994 to exploration of the Azeri-Chirag-Gunashli beds in exchange for a production share. The oil bed is regarded as the most significant one in outside OPEC's jurisdiction[133]. Following that, agreements with various leading oil companies were signed for the production and share of 30 other important oil and gas beds in the Caspian Sea. All this progress on the field, as well as discoveries of new resources, led to the development of significant oil pipelines in the region.

The Baku–Tbilisi–Ceyhan oil pipeline, one of the region's most significant projects, has been in operation since 2006. The pipeline stretches for a total of 1,768 kilometres, bringing oil from the Azerbaijani shores of the Caspian Sea to the Mediterranean port of Ceyhan.[134] State Oil Company of the Republic of Azerbaijan continues to play a key role in the practical implementation of oil and gas projects.[135] The State Oil Fund of the Republic of Azerbaijan was set up in 1999 to handle the administration of oil revenues in the country[136]. Additionally, other government agencies in

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[131] TSIROPOULOS, I.; NIJS, W.; TARVYDAS, D.; RUIZ, P. *Towards net-zero emissions in the EU energy system by 2050*. JRC Technical Reports, 2020, pp.6. Online available at: < https://publications.jrc.ec.europa.eu/repository/bitstream/JRC118592/towards_net-zero_emissions_in_the_eu_energy_system_-_insights_from_scenarios_in_line_with_2030_and_2050_ambitions_of_the_european_green_deal_on.pdf>

[132] Beginning of the New Petroleum Age by Jacobzadeh M.

[133]Baku-Tbilisi-Ceyhan pipeline. Official website of British Petroleum. Online available at: < https://www.bp.com/en_az/azerbaijan/home/who-we-are/operationsprojects/pipelines/btc.html>

[134]Baku-Tbilisi-Ceyhan pipeline. Official website of State Oil Company Azerbaijan. Online available at: < https://www.socar.az/en/page/baku-tbilisi-ceyhan-pipeline>

[135] ZEYNALOV F. *The Oil and Gas Resources of Azerbaijan. A country's transformation into a regional energy hub.* Baku, 2016, pp. 139

[136] State Oil Fund of The Republic of Azerbaijan. Online available at: < https://www.oilfund.az/en>

Azerbaijan compile data on oil production, exports, and imports. According to its regulations, the State Statistics Committee of the Republic of Azerbaijan is authorised to collect, store, and disseminate data regarding the production, export, and import of petroleum products[137]. Later on, Azerbaijan has decided to expand its oil industry by joining a number of international agreements in response to the growing concerns of consumers regarding the investment of large amounts of foreign capital in its oil industry and energy security. Thus, on May 29, 2000, the Republic of Azerbaijan joined the UNCITRAL Convention on the Recognition and Enforcement of Foreign Arbitral Awards (New York Convention dated 1958) without any reservations[138]. Afterwards, Azerbaijan became a member of the World Bank, the International Development Association, the International Finance Corporation, the Islamic Development Bank, and the European Bank for Reconstruction and Development. It also ratified the Convention on the Settlement of Investment Disputes between States and Citizens of Other States administered by the International Center for Settlement of Investment Disputes. At the same time, the government approved the Azerbaijani Energy Charter and its Protocol and is a member of the Energy Charter Conference.[139]

The development of oil's regional transit narrative is supported by the EU under the TACIS/TRASECA programs. Azerbaijan has reached up to 40 bilateral investment agreements with neighbouring countries as well as the United States, Germany and UK. Such agreements have been made mainly in the field of double taxation.

As we mentioned above, the status of the Caspian Sea remains unsolved. At the time of the adoption of the Convention on the Status of the Caspian Sea in 2018, August 12th, only the status and limits of territorial waters and fishing zones were determined for the nations. The current status of delamination of the Caspian baseline did not change. Therefore, the sectoral administration of the Caspian Sea is governed by agreements between Azerbaijan and Russia, Azerbaijan and Kazakhstan, and Kazakhstan and Russia.[140]

Consequently, all foreign oil companies operating in the Republic of Azerbaijan in the

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[137] Official website of State Statistical Committee of the Republic of Azerbaijan. Online available at: <https://www.stat.gov.az/source/balance_fuel/?lang=en>

[138] New York Convention. Online available at: < http://www.newyorkconvention.org/>

[139] LION, K. Fiscal sustainability and the State Oil Fund in Azerbaijan. *Journal of Eurasian Studies* (Vol. 6), 2015, pp. 120-121

[140] Convention on the Status of the Caspian Sea. Online available at: < http://www.en.kremlin.ru/supplement/5328>

exploration and exploitation of oil fields are subject to the relevant Law, and their activities involve the use of limited natural resources based on a licence.

Regarding the issues of taxation in relation to oil products, according to the Tax Code of the Republic of Azerbaijan, which entered into force on January 1, 2001, taxes applied to the exploration and production of oil are considered state taxes, and these taxes include a 20 percent profit tax (enterprise income tax) or a simplified tax, 18 percent value added tax, personal income tax, mineral extraction tax, excise tax, road tax, property tax of legal entities, land tax, as well as socially oriented taxes and levies are included. Specifically, the Tax Code determines the amount of mining tax for crude oil production at 26 percent (Article 215).[141]

Given Azerbaijan's intention to become the most significant oil exporter in the region by the end of the 20th century, becoming a member of OPEC was one of the most important questions facing the government. While exploring the possibility of Azerbaijan joining OPEC, this conception may be dismissed. This strategy may be influenced by the fact that Azerbaijani oil prices on the global oil market differ from OPEC-set prices. Membership in OPEC can subject Azerbaijan's oil industry to a strict administrative framework regarding export quotas, which violates the country's energy and economic security strategy. The serious efforts of OPEC member states to join the Organization for Economic Cooperation and Development have resulted in a desire to gain complete control over oil production quotas and prices on the global market[142].

At the same time, the sale of oil at high quotas by new oil exporters is putting OPEC member states in a difficult position because black gold's excessive production has led to falling oil prices on the world market. The characteristics of oil produced from the Caspian Sea pose a competitiveness for OPEC members. Therefore, OPEC's interests are met by the membership of new oil-exporting nations, especially the governments of Caspian, as well as Azerbaijan. OPEC's interest in Azerbaijan is based on these factors. As already mentioned, cooperation with the EU is of particular importance in the energy strategy of the country. One of the highlights of the EU’s energy policy is ensuring energy security at the expense of diversification of energy margins. In this regard, the use of carbohydrates in the Caspian Sea is considered ideal for the Union. In that sense,

[141] Article 215, Tax Code of the Republic of Azerbaijan. Online available at: https://cis-legislation.com/document.fwx?rgn=2601>

Azerbaijan is an important strategic and reliable partner of the EU because of its geographical situation and the richness of its energy supply. Furthermore, 4-5 percent of the oil imported by members of the EU is supplied by Azerbaijan.[143]

International Cooperation with Azerbaijan's after its independence

Upon attaining historical independence in 1991, the Republic of Azerbaijan signed the European Energy Charter, the 1994 Energy Charter, and the Protocol on Energy Efficiency and Environmental Affairs on December 19, 1994, and adopted amendments to the Energy Charter regarding trade aspects of the Conflict in 1998. As a result of the signing of these documents, which reflected the fundamental beginnings of the European Union's energy policy, the European Union recognised its relations with Azerbaijan as one of the most crucial aspects of its multilateral cooperation policy and foreign policy doctrine. The TACIS Programme was the incentive for the establishment of energy supply trade relations between two researched geographic regions. Since 1996, the INOGATE project, which was created as part of the Eastern Partnership Program, has played an important role in energy trading. INOGATE was the European Union's longest-running energy technical assistance programme and operated within the framework of the Baku Initiative Policy and Eastern Cooperation.[144]

Beginning in 1998, Azerbaijan became a center of Europe's Southern Caucasus politics. The main reason for this was Azerbaijan's rich energy supply and geology. On the initiative of Heydar Aliyev, national leader of Azerbaijan, a conference on the restoration of the Great Silk Road was held in Baku on September 7-8, 1998.Under the auspices of the EU, the Conference on the Historical Silk Road in Baku was an important step in the decision to select the main export oil pipeline. The countries participating in the conference signed a multilateral agreement on the development of the European-Caucasian-Asian Road.[145]Participants of the Baku Declaration, which was adopted at the conclusion of the conference, agreed on the creation of a new, economically safe, and productive transportation infrastructure to transport cargo, especially energy carriers, to world

[143]The European Union and Azerbaijan fact sheet. Online available at: < https://www.eeas.europa.eu/azerbaijan/european-union-and-azerbaijan_en?s=217

[144] AZIMOV, A. European energy policy and the EU-Azerbaijani energy cooperation . *Journal of Comparative Politics*. Vol. 14, 2021, pp. 80-82

[145] How TRACECA Started. Online available at: <http://www.traceca-org.org/en/about-traceca/history-of-traceca/>

markets. One of the achievements of the new oil strategy is the introduction of western technology to Azerbaijan and the use of new cooperation. Current growth prospects for export pipelines increase the opportunities for Azerbaijani oil to be exported to European markets, which can be used to transport oil to other regions in the future.

After regaining its state independence in 1991, the basis of the legal framework for the regulation of oil and gas issues was established with Law No. 94-IQ on the Energy resources utilization dated May 30, 1996[146], Law No. 541-IQ dated November 24, 1998, on Energy[147] and the Law No. 439-IQ dated February 13, 1998, on the Subsoil[148]. At the same time, Article 14 of the Constitution of the Republic of Azerbaijan dated November 12, 1995, on natural resources should be cited as the main determining legal norm in the regulation of oil and gas issues.[149].

The Memorandum of Understanding on Strategic Cooperation in Energy, signed between Azerbaijan and the EU in 2006, is considered the most important document on energy cooperation with the EU of Azerbaijan. The memorandum identified four important aspects of energy cooperation: legislative adaptation, strengthening infrastructure and transit systems, energy efficiency, technical cooperation, and expertise in the transit of oil from the Caspian Sea to EU member states and international oil markets. In this context, projects played an important role in terms of closer integration into the energy market of the EU.

In this regard, the Republic of Azerbaijan's need for legal regulation of oil export relations has led to the establishment of appropriate standards and the signing of bilateral treaties and agreements. In this regard, the bilateral agreements of the Republic of Azerbaijan are exemplary. It should be noted, too, that after independence, our Republic began to speak on the side of several bilateral agreements. However, bilateral treaties on Azerbaijan's oil exports are primarily considered production share agreements with large oil companies. Unlike intergovernmental treaties, which serve as the subject of the right to international treaties, these agreements regulate the government's special legal relationship between the contracting parties. Parties to such

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[146] The Law of Azerbaijan Republic On Energy Resources Utilization. Online available at : <https://policy.asiapacificenergy.org/sites/default/files/Law%20on%20the%20Use%20of%20Energy%20Resources%20%28EN%29.pdf>

[147] The Law of Azerbaijan Republic on Energy. Online available at: < https://e-qanun.az/framework/5095>

[148] The Law of Azerbaijan Republic on Subsoil. Online available at: <https://cis-legislation.com/document.fwx?rgn=2709>

[149] Article 14 of the Constitution of the Republic of Azerbaijan

agreements are, on the one hand, the Republic of Azerbaijan and, on the other hand, one or more major oil companies. Moreover, the region participates in bilateral interstate cooperation on oil exports and storage.[150]

International common law and international special purpose legal entities serve as the basis for the country's bilateral cooperation in the exploration, exploitation, and export of fossil fuel deposits. Likewise, the country's bilateral investment agreements with other states and agreements on the prevention of double taxation, as well as the agreements between the government and large oil companies, all serve to facilitate the country's bilateral cooperation. The government's international special legal entities are the bilateral oil agreements signed by Azerbaijan provide a solid foundation for the growth of cooperative efforts that benefit both parties. Azerbaijan's international reputation, European economic growth, and the speed with which investment passes into the country are all influenced by the country's legal framework on fossil fuels regulation. Aligned with the sovereignty of large oil companies and define mutual privileges, rights, and responsibilities for the parties to the treaty.[151]

Brief review of Azerbaijan's contractual framework on exploration, development, and exploitation of oil and gas fields.

Azerbaijan has always been a vital location for the exploration and exploitation of fossil fuels and natural gas beds, as well as prospective structures, so the country has leading oil companies from 11 worldwide countries (including the United States, Russia, Britain, France, Norway, etc.). Today, more than twenty-three oil contracts with thirty-three Western oil companies have been signed as part of these efforts. Initially, evaluations indicated that the Azeri, Chirag fields and the deep-water part of the Gunashli field had 511,000,000 tons of crude oil. However, current evaluations set oil reserves at 1,072,000,000 tons of crude oil. The volume of investments in these contracts is estimated at $41 billion. More than $7 billion has already been invested in the development of oil industry infrastructure. Only the Contract of Century has extracted 546 million

[150] NURIYEV, S.S. *Oil and European Policy*. Baku, 2002, pp. 263-269
[151] MOHAMMADOV, R.F. *The Republic of Azerbaijan oil and gas politics: legal approaches*. Baku, 2014, pp. 527.

tons of oil and 49 billion cubic meters of gas.[152]

Shown below is a brief summary of the key production share agreements on exploring and developing oil beds in the Azerbaijani sector of the Caspian Sea, together with their details[153]:

1.	The Agreement on the exploration and development of Azeri, Chirag and Gunahsli beds.	Signed on September 20, 1994, and was ratified on November 15, 1994.	The agreement is scheduled for 30 years. Operations are carried out by the Azerbaijani International Operations Company.
2.	The Agreement on the Exploration, Operation, and Share of the Marine Bloc, which includes the Shahdaniz Perspective Structure.	Signed on June 4, 1996, and was ratified on October 4, 1996.	The agreement is scheduled for 30 years. Operations are carried out by BP Exploration (King-Sea LTD) Company.
3.	The Agreement on the Exploration, Operation, and Share of the D-222 (Yalama Offshore) Perspective Block.	Signed on July 3, 1997, and was ratified on November 4, 1997.	The agreement is scheduled for 25 years. Operations are carried out by Lukarco-Operating Company.
4.	The Agreement on the Exploration, Operation, and Share of the Oguz Marine Bloc.	Signed on August 1, 1997, and was ratified on November 7, 1997.	The agreement is scheduled for 25 years. Operations are carried out by the Oguz-Operating Company.
5.	The Agreement on the Exploration, Operation, and Share of the Absheron Marine Bloc.	Signed on August 1, 1997ans was ratified on November 11, 1997.	The agreement is scheduled for 35 years. Operations are carried out by Chevron-Overseas Petroleum is conducted by Azerbaijani LTD Company.
6.	The Agreement on the Exploration, Operation, and Share of the Perspective Structure of the Nakhichevan.	Signed on August 1, 1997, and was ratified on November 14, 1997.	The agreement was scheduled for 35 years. Operations are carried out by Exon Azerbaijani Operating LLC Company.

[152] Official website of President Ilham Aliyev. *Oil sector.* Online available at: <https://president.az/en/pages/view/azerbaijan/contract>

[153] BABAZADE, N.A. Development of The Oil Business in Azerbaijan (Azerbaijani edition). Baku, 2016, pp. 48, 75. Online available at: <https://unec.edu.az/application/uploads/2016/07/BABAZADE-Magistr-dissertas.pdf>

7.	The Agreement on the Exploration, Operation, and Share of the Kurdashi Marine Bloc.	Signed on June 2, 1998, and was ratified on July 7, 1998.	The agreement was scheduled for 35 years. Operations are carried out by Agip Azerbaijani Ltd Company.
8.	The Agreement on the exploration, operation, and distribution of blocks Sikhzagirli, Sheytanud, Burgut, Donguzduq, Nardaran, Ilkchi, West Hajivali, Sundi, including The Eastern Haggai, Turaga, Kanizdag, West Duvanni, Duvanny, Solaxay, and Dashgil beds.	Signed on June 2, 1998, and was ratified on November 13, 1998.	The agreement was scheduled for 25 years. Operations are carried out by Gobustan Operating Company.
9.	The Agreement on the exploration, operation, and share of the Marine Bloc, which includes the Inam Perspective Structure.	Signed on July 21, 1998, and was ratified on December 1, 1998.	The agreement was scheduled for 25 years. Operations are carried out by BP Amoco Exploration (Inam) LTD Company;
10.	The Agreement on the exploration, operation, and share of the Araz, Alov, and Eastern Perspective Structure.	Signed on July 21, 1998, and was ratified on March 18, 1999.	The agreement was scheduled for 25 years. Operations are carried our by BP Ainoco Exploration (Alov) LTD Company.
11.	The Agreement on the exploration, operation, and production of the Kursangi and Karabakhli beds.	Signed on December 15, 1998, and was ratified on April 22, 1999.	The agreement was scheduled for 25 years. Operations are carried out by Salyan Oil Limited Company.
12.	The Agreement on the exploration, operation, and production of the Marine Blocs which include the Atashgah, Yanan Tava, and the Mugan Maritime Perspective Structure.	Signed on December 25, 1998, and was ratified on June 21, 1999.	The agreement was scheduled for 25 years. Operations are carried out by JAOC Operating Company.
13.	The Agreement on the exploration, operation, and production of Zafar-Mashal beds.	Signed on April 27, 1999, and was ratified on May 2, 2000.	The agreement was scheduled for 25 years. Operations are carried out by Exon Azerbaijan Operating LLC.
14.	The Agreement on the exploration, operation, and production of the Padar oil field and its adjacent Perspective Structure.	Signed on April 27, 1999, and was ratified on June 17, 2000.	The agreement was scheduled for 25 years. Operations are carried out by Kura Valey Operating Company.

15.	The Agreement on the reconstruction, exploration, operation, and production of the Mishovdah and Kalamaddin oil fields.	Signed on September 12, 2000, and was ratified on November 22, 2000.	The agreement was scheduled for 25 years. Operations are carried out by Karasu Operating Company.
16.	The Agreement on the reconstruction, rehabilitation, exploration and production of the Zig and Hovsan oil fields.	Signed on January 9, 2001, and was ratified on June 12, 2001.	The agreement was scheduled for 25 years. Operations are carried out by Lucoil Overseas Company.
17.	Azerbaijan, Georgia and Turkey signed an interstate agreement to support the main export pipeline between Baku-Tbilisi-Ceyhan (BTC pipeline).	Signed on November 18, 1999, and was ratified on May 9, 2000.	The agreement was scheduled for 40 years from the date of the first shipment of crude oil. Operations are carried out by the BTC Pipeline Company.

The huge oil and gas reserves are an important geological factor that has a profound impact on the geological strength of the Caspian in the region. In the Caspian basins, the oil and gas reserves are 48 billion barrels and 292 trillion cubic feet, respectively. There are deposits of about 75 percent of oil and 67 percent of natural gas within 100 miles of the coast[154]. According to prominent politician D. Fain, "There is no exception to the situation in which the United States will be forced to apply security provisions in the Persian Gulf to the Caspian Sea."[155] Furthermore, according to V.A. Huseynov, "oil production is often carried out in conflicting and politically volatile regions of the world"[156]. One of the important projects to be noted is the Blue Stream pipeline which is owned by Gazprom (Russia 50%) and Eni (Italy 50%) in a length of 1,213 kilometres. The pipeline transports natural gas across the Black Sea from Russia to Turkey. Due to the substantial investment of $3.2 billion in its construction, it ranks among the deepest fields in the world. The onshore operation of the pipeline is controlled and managed by the Gazprom (Russia) and Botas (Turkey). Commercial gas deliveries commenced in December 2002, and the official inauguration of the Blue Stream gas pipeline occurred in February 2003. Annual gas transmission capacity amounts to sixteen billion cubic metres (bcm). Russian current plans include Turkey as a transit lobby for the delivery of gas to

[154] U.S Energy Information Administration. Caspian Sea. Online available at: <https://www.eia.gov/international/analysis/regions-of-interest/Caspian_Sea>

[155] GUSSEINOV, B.A. *Caspian Oil. Economics and Geopolitics*. Baku Press.2002, pp. 134.

[156] GUSSEINOV, B.A. *Caspian Oil. Economics and Geopolitics*. Baku Press.2002, pp. 134-135.

Greece, Italy, as well as Lebanon and Israel. At the same time, project is an alternative supply scheme for raw materials delivery to Turkey without the use of intermediaries[157]. Greece, on the other hand, will become a new EU transit entry as it heads to the Italian market. Such a feature is of some interest: Turkey is also part of Iran's energy plans, which are likely interested in increasing its share of the European market. And Europe, alarmed by the "gas disputes" between Russia and Ukraine and serious disagreements, is considering a new alternative pipeline drawing project (Nabukko) by crossing from Turkey through Bulgaria, Romania, Hungary and Austria.

It should also be noted the crucial role of Russia in energy supply of global market, which is the exporter of one in five percent of natural gas produced worldwide and one in nine of crude oil. On the European continent, this state is a leader in energy carrier exports.

To summarize, we can surely acknowledge that energy has historically been one of the determining factors in relations between participants in international relations, but it has never been as current. Azerbaijan's carbohydrates are adequately affected not only in the region but also around the world. Currently, the world's globalization and intelligence processes require governments to take a new approach to regulating legal and economic processes, including transmission and harmonisation of national legislations to the unity approaches. The social-economic development of governments depends heavily on energy supplies which structures energy law and security, as well as energy supplies are unevenly located on earth, which can be eliminated by interstate cooperation. The geological significance of Azerbaijan is analysed in its strategic position. We also confirm that the importance of Caspian' oil reserves is that these resources play an important role in meeting the needs of the global economy and will play an important role, so world powers are interested in the geological division of Caspian. The subchapter also highlighted that Caspian ranks among the largest oil reserves in the world. As a conclusion, the preceding subchapter brought attention to the following facts:

- The oil and gas reserves of Azerbaijan have a negligible effect not only on regional but also global events. So, without energy, it is impossible to imagine the modern world, and oil is one of the most important factors in international relations today. Cooperation in the use of energy supplies is a difficult process and requires

[157] Blue Stream Natural Gas Pipeline. Online available at: <https://www.nsenergybusiness.com/projects/blue-stream-natural-gas-pipeline/>

comprehensive research.

- Each country faces an energy security problem, and in the modern world, the economy's supply of fossil fuel energy resources and energy efficiency are considered one of the most important indicators of the government's growth rate.
- The acquisition of international, regional, and bilateral treaties, cooperation, and agreements is the means by which international energy security is provided. Priority is given to the need for bilateral and cooperation agreements between the European Union and exporting nations, as well as compliance with the Energy Charter Treaty (ECT) and the implementation of European law.
- Azerbaijan's rich oil reserves play a major role in the energy supply of the European continent as much as the republic's sustainable development and energy security. The failure to politicize Azerbaijani oil responds to the political interests of Western governments. The structure of oil and gas pipelines designed to export Azerbaijan's carbohydrates contributes to the expansion of the Eurasian transportation system and to the energy security of western nations and Europe.
- Russia's use of oil as a means of political pressure against the West is one of the main factors contributing to strengthening the European cooperation with Azerbaijan and other supplier countries in fossil fuel energy resources, as well as encouraging the union to increase the transformation rate to the renewable resources.
- The issue of Caspian, whether of being a sea or lake is also one of the most widely discussed problems in the world, and there is no uniform approach to it.
- As countries that own and produce energy are seeking demand diversity to ensure their economic growth, importing countries with more energy consumers are following supply diversity.
- Analysis of the European Union's modern energy policy and strategies proving that existing concepts and projects (especially in terms of establishment legal framework for renewable energies) serve one main purpose, which is gaining independence from Russia's energy dependence. However, as a key issue, Member States of the EU are interested in implementing individual energy policies depending on their benefits.

CHAPTER III. ESTABLISHMENT OF PETROLEUM CONTRACTS AND EXPORT PIPELINES IN AZERBAIJAN. CONTRACTUAL STRUCTURE OF PRODUCTION SHARE AGREEMENTS

III.I. BAKU-TBILISI-CEYHAN AS A MAJOR EXPORT PIPELINE AND ITS ROLE IN ESTABLISHING LEGAL FOUNDATION AND PRACTICES FOR RELATIONS WITH FOREIGN OIL COMPANIES

Summary

Chapter III.I focus on the contractual framework of the Baku-Tbilisi-Ceyhan Agreement. This agreement includes participants from EU oil and gas companies, emphasising its direct impact on EU energy security. The subchapter focuses on the PSA's distinctive contractual elements, highlighting their importance in the contractual foundation of the energy sector.

Stable and sustainable storage is important in terms of energy security. Regulatory governance of oil and gas pipelines is governed not only by international treaties, but also by bilateral, trilateral, and specific regional agreements. According to the "The framework agreement on institutional bases of creation of interstate oil transportation system and gas", which was signed in 1999 on July 22, transit risks are being resolved in accordance with international economic law and principles declared in the Energy Charter Treaty. This agreement was made to establish an intergovernmental system of oil and gas storage[158].

Within recent oil-and-gas agreements, BTC is one of the comprehensive agreements that have been subject to international legal regulation on a sufficiently broad scale. On October 29, 1998, the presidents of Turkey, Azerbaijan, Georgia, Kazakhstan, and Uzbekistan and the U.S. Energy Minister signed the Ankara Declaration defending the withdrawal of the main export pipeline by the Baku-Tbilisi-Ceyhan route[159]. On November 18, 1999, at the Sixth OSCE Summit of Heads of State or Government summit in Istanbul, with the support of European countries and the United States, an agreement was signed to transport crude oil to the regions of Azerbaijan, Georgia, and Turkey

[158] Framework Agreement on Institutional Bases of Establishment of the Interstate System of Oil and Gas Transportation. Online available at: <https://online.zakon.kz/Document/?doc_id=1028517>

[159] Ankara Declaration, signed on 29 October 1998 by the Presidents of Azerbaijan, Georgia, Kazakhstan, Turkiye and Uzbekistan. Online available at: < https://digitallibrary.un.org/record/264846/files/A_C.2_53_9-EN.pdf?ln=en>

through the Baku-Tbilisi-Ceyhan main export pipeline[160]. The agreement consists of a Preamble, 10 substances, and supplements between governments of countries with transit areas adopted as supplements and major export pipeline participants, etc. Given the interstate nature of the project, the parties have agreed to cooperate in their respective energy sectors and to protect foreign investment in accordance with international legal standards. Article I of the Agreement is devoted to the concepts used and Article II is based on mutual statements, provisions, and obligations. In Article III, safety and pipelines are legally regulated. Article IV of the Agreement is devoted to technical, ecological standards and safety standards, V substance tax, the institutional realism mechanism of the Sixth Article Agreement, VII additional provisions, VIII dispute resolution, IX deposits, and X conclusion.

Although the value of carbohydrates in the Caspian Basin varies, all experts agree that the Caspian's energy supply was among the world's sources in the 21st century. During a meeting with 15 major U.S. oil companies, the White House leadership reminded them that the Baku-Tbilisi-Ceyhan oil pipeline was more geostrategic and geologically viable. The signing and implementation of this treaty, known as the Contract of Century, is a concept of economic development in independent Azerbaijan.

Baku signed international oil contracts with foreign oil companies in Washington, Moscow, London, and Paris beginning in 1994. These agreements include investments of approximately $60 billion in the petroleum industry of Azerbaijan. Today, more than thirty oil companies from numerous nations are implementing this agreement. The globalisation of Azerbaijan's oil exports is a core principle of the country's oil strategy. The negotiations for the critically important Baku-Tbilisi-Ceyhan main export pipeline project have been fruitful, and much work has gone into its implementation. As a result of the implementation of the BTC oil export pipeline, Azerbaijan became one of the world's oil centres, which first absorbed the huge energy supply of the Caspian Sea and shaped a new economic model for quality in the region's development, expanded political and trade relations between Europe and Asia, and played an important role in the Caspian and Caucasus region. As mentioned above, on November 18, 1998, the Istanbul Declaration was signed between Azerbaijan, Turkey, Georgia, Kazakhstan, and Turkmenistan with U.S. testimony to support the BTC

[160] Istanbul Document, 19 November 1999. Online available at: <https://www.osce.org/files/f/documents/6/5/39569.pdf>

project and to attract oil from Kazakhstan and Turkmenistan. As a logical continuation of this process, construction of the BTC belt began on September 18, 2002, bringing the project the reality. The total length of this belt is 1,769 miles ((1,770 km). The percentages of the participants is as follows: BP (6.53%), ARDNS (25%), Junior (8.9%), Statoil (8,714%), TPAO (6.5%), ENI (5%), TotalFinaElf (5%), ITOCHU(3.40%), INPEKS(2.50%), ConocoPhillips (2.50%) and Hess (2.36%) in America). While assessing the legislative characteristics of the BTC oil pipeline, it can be stated that it refers to both international legal norms, transnational mechanisms and state legislation. Article 2.1 of the Agreement states that the government of each participating party takes a commitment to the government of the other party that it must submit it to its national parliament to give superior legal power in relation to the main export pipe under its internal legislation without delay after signing it[161]. Furthermore, Article 2.7 elaborates on the authority of the current legal regime of the BTC legal agreement[162]. Such ratification officially determines participants' commitment according to international law which is ensured by their domestic legislative framework. The complex structure of the agreement is constructed according to both international and domestic law principles. Establishing regulatory elements according to the principles and requirements of relevant treaties, giving it powers by the national law, and harmonising the document to a complex one, has been evaluated as the most comprehensive approach in terms of contract law. BTC agreements could be assessed as the benchmark for the projects which will be implemented in renewable energy sources in the country.

Regulatory mechanisms of the BTC pipeline have been construed with the safety standards which are set forth under the EU law, particularly under the 85/337/EEC and 97/II/EC Directives, which establish fundamental environmental protection threshold during exploitation and storage of oil resources.

When pipelines are confined to the territory of a single state, the adopted rule stipulates that internal legislation must be referenced in the legal regulation of the pipeline. If the pipeline passes through multiple countries and crosses the ocean floor, it is governed by international law. Transnational pipelines that navigate government borders are viewed as two legally identical pipelines or as pipelines that are considered and legally integrated under a single international legal

[161] Article 2.1 of the Baku-Tbilisi-Ceyhan Main Export Pipeline Agreement (18.11.1999)
[162] Article 2.7 of the Baku-Tbilisi-Ceyhan Main Export Pipeline Agreement (18.11.1999)

regime, regardless of which country the pipeline passes through.

The BTC Oil Pipeline's Intergovernmental Agreement is titled "Mutual Statements, Provisions, and Commitments." Article 1 outlines the obligation to create international legal obligations for participants in the BTC oil pipeline through national legislative action. In accordance with this period, each participant has been granted legal authority following the ratification of an international agreement in accordance with national internal standards. Analyses of the agreement revealed that the rights and responsibilities stipulated by the parties in all agreements are identical, as there are no fundamental differences in the duration of the agreements, including employment, harvest period duration, share region, bonus amounts, etc. Therefore, the rights and obligations of the parties were studied in the Azerbaijani sectors of the Caspian Sea, known as the Contract of Century, on September 20, 1994, in accordance with the agreement on the joint operation of the Azeri, Chirag, and Gunashli beds and the share of oil production. If disagreements are not resolved at a mutual speed for 30 days, the dispute is resolved in arbitration. The agreements are also subject to the principle of international law in the "pacta sund service".

However, taking into consideration the complex aspects of the agreement, what conclusions are we able to make with regard to the crossing elements of international law and domestic law as a result of this agreement?

- First, the BTC agreement has common qualities designed for a treaty institute in the international world. The parties have agreed to reciprocal rights and responsibilities, the duration of the agreement, taxes, losses and damages, environmental protection, heirs and relevance, dispute resolution and applicable laws, and so on.
- Due to the nature of the agreement, it is an international treaty. This is confirmed in terms of the agreement's legal authority, subjects, and provisions. The agreement, based on the requirements of international legal norms and national law, is an international treaty provision. On the other hand, it establishes strict legal obligations for the participating countries.
- Azerbaijan's potential growth has been expanded, whereas Russia and Iran's influence in the region was relatively weakened by the strategic interests of the USA and the EU. At the same time, the agreement accelerated the settlement of the status of the Caspian Sea. For a long time, Russia has attempted to gain supremacy over the energy export routes in the Caspian region. The BTC pipeline is viewed as the fundamental point and systematic device designed to reduce its control

over the European oil supply network. Scholars believe that the crisis that erupted between Georgia and Russia in August 2008 was triggered by Russia's desire to obtain considerable control over the pipeline, potentially interfering with crude delivery to Europe[163].

- One of the biggest advantages of the Baku-Tbilisi-Ceyhan project is the delivery of Azerbaijani oil to the world's deepest and largest port, passing through the Bosphorus Strait.

The transportation of Kazakhstan's oil through BTC leads to an improvement in the efficiency of the project, which ends conversations about whether BTC will be economically ineffective. The BTC oil tank refers to 50 million tons of Azerbaijani oil a year. The acceptance of Kazakhstan in the BTC initiative occurred on June 16, 2007. On the same day, the presidents of Almaty and Azerbaijan reached a bilateral agreement to facilitate the transportation of Kazakh oil to global markets via the BTC route, which passes through Azerbaijan and the Caspian Sea. The agreement stipulated the construction of the Aktau-Baku route to ensure the continued transportation of Kazakh oil via the BTC. Kazakhstan's joining the BTC also allows the country to export its oil to world markets through the Mediterranean. The significance of BTC grows annually for both the region's producer states and the oil-producing states of the EU[164].

BTC laid the foundation for a wide-ranging mutually beneficial partnership with foreign oil companies. As a host participant, the Republic of Azerbaijan is represented in two forms. As the owner of natural resources, he signed a contract with foreign partners on behalf of the government, and on the other hand, he participated in a consortium of foreign oil companies. Baku-Tbilisi-Ceyhan found a solution to the process of preparing and implementing the main export pipeline project through tense talks and discussions. The establishment of a reliable export system was a vital element in terms of implementing Azerbaijan's oil strategy.

The launch of the BTC not only increased Azerbaijan's oil export opportunities to Europe, but also strengthened its position as a transit country in the region. The Azerbaijani region played a significant role in transporting oil from Kazakhstan and Turkmenistan to Europe while ensuring

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[163] JOSHUA, K. *U.S. Intelligence: Russia Sabotaged BTC Pipeline Ahead Of 2008 Georgia War. (2014).* Online available at: < https://eurasianet.org/us-intelligence-russia-sabotaged-btc-pipeline-ahead-of-2008-georgia-war>

[164] Baku-Tbilisi-Ceyhan Pipeline. Official website of State Oil Company of Azerbaijan. Online available at: < https://www.socar.az/en/page/baku-tbilisi-ceyhan-pipeline>

Europe's energy security and helping to reduce its reliance on Russian energy. The implementation of the BTC is also important in delivering carbohydrates to world markets and as it is strengthening the country's geological, and geo-economic positions, and the development of the oil industry from a global perspective.

At the time of the BTC's signature, several agreements were reached between oil companies. First, the agreement on the use of Azeri, Chirag, and Gunashli oil deep beds, the conclusion of the contract for the share of production, the recognition of companies' rights to sell their shares in the contract to other companies in part or in whole, and the extension of the contract period in accordance with the parties' interests to the 30-year term of the BTC, it was decided to extend the contract period when reserves were discovered.

As we discussed above, after extensive diplomatic, political, and legal discussions, Kazakhstan joined the BTC project. On that day, the state heads of Kazakhstan and Azerbaijan signed an agreement to support the export of Kazakhstan's oil to European markets through the Caspian Sea and the BTC pipeline. The agreement meant the creation of an Aktau-Bakka transportation system to transport Kazakhstan's oil to the BTC. At the same time, discussions were started regarding the transportation of Turkmenistan oil through the BTC pipeline. BTC directly provided the economic interests of the countries involved in the project and created broad opportunities for solving the energy security problem of the EU. We probably wouldn't be mistaken if we also noted that the BTC has stimulated strategic cooperation between Azerbaijan-Georgia and Georgia-Turkey. As a non-OPEC oil country, Azerbaijan significantly impacted Russia's influence by supporting the energy security of the EU. When the BTC was constructed, the daily oil production of the Republic of Azerbaijan was 200,000 barrels. Since 2008, 50 million tons of Azerbaijani oil have been shipped annually. To characterize the impact of the BTC on the dynamics of the region, it needs to be investigated from the political, legal, and economic perspectives[165].

The role of the BTC is also crucial in terms of the diversification of energy resources of the European market while establishing strong ties with Central Eurasia. Given that energy projects with Azerbaijan are critical to ensure the EU’s energy security, the two geographical regions are cooperating closely in this regard. Given the current situation with Russia and its war in Ukraine, the

[165] Oil Flows and Export Capacity in the Caspian Sea and Black Sea Regions. Energy Charter Secretariat, 2008. pp.16-17. Online available at: <https://www.energycharter.org/fileadmin/DocumentsMedia/Thematic/Oil_Flows_2008_en.pdf>

pressure and sanctions applied to Russian-originated business individuals and companies, such as energy projects and supply from Azerbaijan become even more actual. Recent growth prospects for export pipelines increase the opportunities for Azerbaijani oil to be exported to European markets, which will enable oil to be transported to other regions in the future. When it comes to the cooperation of the EU with Azerbaijan in the field of oil exports, the relationship holds the same enthusiasm and good will as described in the Memorandum of Understanding on Strategic Cooperation in Energy signed between the Republic of Azerbaijan and the European Union in 2006. The process of supplying Azerbaijani oil to the EU is realized only to several member states of the single market, which is carried out in the context of bilateral cooperation in the Republic of Azerbaijan.

In general, extensive programmes for cooperation with post-Soviet countries have been continuously implemented through many domains. TACIS, TRACECA, and INOGATE should be among them. They help Azerbaijan's economic reforms by providing appropriate technical and administrative assistance through the EU TACIS programme. Azerbaijan has prioritised three major destinations: infrastructure, the private sector, and human resources. Following the approval of the Basic Multilateral Agreement in Baku in September 1998, the TRACECA programme became a development cooperation initiative focused on transport along the corridor connecting Europe, the Caucasus, and Asia. In this project, the special efforts of Azerbaijani President Aliyev and Georgian Shevardnadze must be remarked[166]. Currently, Azerbaijan expanding strategic cooperation with major powers of the EU. The country putting great effort into developing its renewable energy resources through integration and harmonisation of the EU Green Deal initiatives. The Baku-Tbilisi-Ceyhan oil pipeline prevents extreme burdens on Turkey's Black Sea straits, not only in terms of economic and political security for Azerbaijan, Georgia, Turkey, Europe but also globally in general. To ensure its sustainable future, the EU must take serious steps towards unifying the legislative framework for the use of renewable energy sources. Anthropogenic effects on the environment, particularly the use of non-renewable energy sources, cause a variety of issues. Today, the international community is interested in the application and use of technologies that consume relatively little energy. It should be noted that this is the concept upon which modern energy

[166] TRACECA. Online available at: <http://www.traceca-org.org/en/home/baku-initiative-and-summit-1998/>

security should be based. Energy supplies typically have a direct impact on international peace and security issues. The acquisition of energy is integral to the appreciation and development of humanity. In this respect, securing energy supply. especially sustainable ones are also a historically significant category. The acquisition of alternative energy sources has been a primary political objective not only in the European Union, but also in the post-Soviet and Caucasian Republics, including Ukraine, Belarus, Moldova, and Georgia. In this regard, Azerbaijani oil extracted from the Caspian Basin is one of the primary sources that sustain the region's intense reliance on fossil fuels.

III.II. ENERGY SECURITY IN THE LIGHT OF OIL AND GAS CONTRACTS BETWEEN THE EU AND AZERBAIJAN. THE SOUTHERN GAS PIPELINE, NABUCCO WEST PROJECT, TANAP, AND TAP PROJECTS

Summary

The subchapter examines key energy collaborations between the EU and Azerbaijan. It investigates key projects such as the Southern Gas Pipeline, Nabucco West Project, Tanap, and TAP Projects to determine their contributions to shaping energy dynamics and ensuring reliability. The chapter discusses the legal frameworks that govern these contracts, highlighting their significance in promoting regional stability and economic development. Finally, it addresses the critical issue of identifying regulatory frameworks and contractual models to strengthen collaboration between the EU and Azerbaijan.

Safety and security concerns, as well as delays in supply, have long been used as political weapons by the countries that supply, transit, or carry oil and gas to exert influence over the countries that ultimately benefit from the transaction. Russia employed this strategy during its invasion of Ukraine, as observed in contemporary politics. As a result of Russia's massive natural gas exports to the EU, it had a significant impact on the daily lives of EU consumers as well as the management of the EU's oil and gas sector, which was forced to implement new strategies. Due to Europe's reliance on Russia for fossil fuels, the Nabucco pipeline is not only risky but is also frequently used by Russia as a means of political pressure. The Caspian Valley — Azerbaijan, Kazakhstan, and Turkmenistan — has been identified as an alternative energy source for Europe in the energy strategy of the EU consumers, as already discussed throughout the research.

The war between Russia and Ukraine, which began on February 24, 2022, has precipitated a gas crisis in the EU, necessitating immediate action. On the other hand, the competition is anticipated to intensify as the demand for natural gas in Europe rises. Three enormous Russian gas pipelines control the entire European natural gas market. The Blue Stream, the world's deepest deepwater pipeline, stretches from the Russian region of Novy Urengoy to Ukraine, Hungary, Slovakia, Austria, the Czech Republic, and Germany, from Belarus to Poland, and from the Black

Sea's bottom to Turkey, Greece, and Bulgaria[167]. Transporting Caspian energy supplies to Europe via the Trans-Caspian and Nabukko pipelines may be a means of limiting Russia's market dominance.

One of the projects that planned to transport gas supplies to Europe in the Caspian region was the Nabukko Gas Pipeline Project which was initiated in 2002 between Austria and Turkey. Thus, annual gas delivery capacity via the Nabucco pipeline from Azerbaijan to the Baumgarten gas hub in Austria was planned to reach 31 billion m3 via a total 3,893 km pipeline. However, the primary limitation of this undertaking had already been predicted from the beginning, as raw materials were scarce: the projected initial gas production of Azerbaijan was 10 billion cubic metres which was lacking at that time[168]. The purpose of this project was to set up a gas pipeline from Turkey through Bulgaria, Romania, Hungary, and Austria to the countries in Central Europe. At the same time, the United States and the European Union collaborated on this project as it was intended to lessen Europe's reliance on gas imports from Russia.

BTC, Baku-Novorossiysk, Baku-Kars, Nabucco, TANAP, TAP, etc. projects are of great importance and are of interest to the EU from the point of view of ensuring the energy security of the Caspian Sea[169].

In February of 2002, Austria's OMV and Turkey's BOTA held their first discussions regarding the construction of the Nabucco pipeline. Subsequently, the Hungarian MOL, Romanian TRANSGAZ, and Bulgarian BULGARGAZ corporations supported the plan to construct the Nabucco pipeline. The Nabucco consortium and the European Commission agreed to provide a grant covering fifty percent of the estimated total costs in December 2003. RWE, the largest energy producer in Germany, announced its intention to purchase 5 billion cubic metres of Azerbaijani gas to be transported through the Nabucco pipeline on November 19, 2007, and subsequently joined the Nabucco consortium in February 2008. In May 2012, the Nabucco consortium presented the Shah Deniz consortium with the Nabucco West proposal[170].

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[167] TSERETELI, M. *The Blue Stream Pipeline and Geopolitics of Natural Gas in Eurasia*. Nov.2005. Online available at: https://www.cacianalyst.org/publications/analytical-articles/item/10483-analytical-articles-caci-analyst-2005-11-30-art-10483.html>

[168] ALEKSANDER, T. *Nabucco – A study in failed EU energy policy.* 2013. Online available at: < https://esthinktank.com/2015/04/06/nabucco-a-study-in-failed-eu-energy-policy/>

[169] TANAP: An Influencer Well Beyond Energy. Published by Independent and cutting-edge analysis on global affairs.Online available at: < http://turkishpolicy.com/article/932/tanap-an-influencer-well-beyond-energy>

[170] ERDOGU, E. Bypassing Russia: Nabucco project and its implications for the European gas security. Dec.2010. pp.8-9. Online available at: < https://mpra.ub.uni-

The Shah Deniz operator, the BP consortium, chose Nabucco West over the Trans-Adriatic Pipeline as the Northern route because it was a revised version of the original Nabucco pipeline. The consortium's decision resulted in the initiation of the new project. The total length of the line, which was planned to begin in Bulgaria and extend from Hungary to Austria, is 1,329 km. The Nabucco Natural Gas Pipeline had been planned to have a minimum capacity of 10 billion barrels per year and a maximum capacity of 23 billion barrels per year when it would be completed in 2018. The following companies were part of the consortium formed to carry out the project:

Austria- OMV Gaz GmbH, Hungary- FGSZ, Romania- S.N.T. - G.N. Transgaz S.A., Bulgaria- BEH, Turkey- Botash. The Nabucco pipeline initiative was being launched to transport natural gas from Turkmenistan, Kazakhstan, and Uzbekistan. However, after experiencing technical and political challenges, project aborted in June 2013. The project was also delayed due to the construction of the Southern Caucasus (Bakh-Tbilisi-Erzurum) piping system for gas supply from the Sah-Deniz gas bed of the Caspian Sea, as well as by the absence of legal status for the Caspian Sea. Implementing a net-zero carbon footprint by 2050 and the European Union's green energy policies have had a major impact on the enthusiasm concerning this project.

The implementation of global energy projects in the Caspian Valley had a positive impact not only on the energy security of Azerbaijan, but also on the energy security of the Eurasian region, the European Union, and the global energy balance. Europe's energy security has been reinforced in part by the fact that Azerbaijan, alongside major corporations in the world's leading economies, produces and exports rich carbohydrates to European markets at independent margins. Baku-Tbilisi-Ceyhan and Baku-Tbilisi-Erzurum gas export pipelines have contributed to the growth and economic viability of the European Union and Azerbaijan's strategic energy cooperation.

2007 characterised the exploitation of the Baku-Tbilisi-Erzurum gas pipeline, which transports Azerbaijani gas through Georgia to eastern Turkey. The proposed TANAP pipeline was intended to transport natural gas to the European border[171]. In contrast, the TAP pipeline refers to the distribution of gas from here to EU nations. According to data from the State Statistical Committee of the Republic of Azerbaijan, the pipeline transported around 1.89 billion cubic metres

muenchen.de/26793/1/bypassing_russia_nabucco_project_and_its_implications_for_the_european_gas_security_word.pdf>

[171] *The Main Transport Routes of Energy Resources*. Online available at: <https://azerbaijan.az/en/related-information/133>

of gas in January 2023, which represents 45.4% of the total natural gas export of the country[172].

The Shah Deniz consortium has selected the Trans-Adriatic Gas Pipeline (TAP) as a project to transport Azerbaijani gas to Europe throughout the 878km stretch. The TAP project is a continuation of the Southern Caucasus Gas Belt (Baku-Tbilisi-Erzurum) and the Trans-Anadolu Gas Belt (TANAP), which refers to gas in the Shahdaniz-2 bed through Greece and Albania, the Adriatic Sea to southern Italy, and from there to Western Europe. In the first phase, 10 billion cubic meters of gas were transmitted[173]. TAP was put into service on November 15, 2020, and it was prepared to start conducting commercial activities at that time. The first shipment of commercial gas from Azerbaijan to Europe via TAP was made on the 31st of December 2020[174].

There is no doubt that modern international energy security has impacts on all other fields, including human rights. The quality of daily needs of end consumers mainly also depends on our energy supply. The direct impact of energy supplies on the global economy has prompted the United Nations and its bodies, as well as international energy organisations, to develop a strategy for energy security and increase the usage rate of green energies. Among these are the International Atomic Energy Agency, the Organization of Petroleum Exporting Countries, the Nuclear Energy Agency, the International Energy Agency, the International Energy Forum, the Conference on Energy Charter, the Organization of Arab Countries, etc. There is a relationship between energy security and energy, legal standards should govern these relationships, and a system of legal framework should be established. In this regard, it is necessary to invoke international law doctrine.

There is a need for safe access to energy supplies, narratives, and consumption, as well as the development of international energy relations' behavioural rules or special principles. International relations are governed by international energy relations, international and national legal norms, as well as all hard and soft law instruments of international energy law. In agreements on cooperation and partnership between the EU and countries that export fossil fuel carbohydrates, the implementation of European law and compliance is a top priority. The EU-Azerbaijan

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[172]*Baku-Tbilisi-Erzurum pipeline transports over 1.8 billion cm of gas in January*. Online available at: < ttps://azertag.az/en/xeber/baku_tbilisi_erzurum_pipeline_transports_over_18_billion_cm_of_gas_in_january-2498477>

[173] BECHEV, D. *The Trans Adriatic Pipeline: Why it Matters and What Comes Next?.* Dec.2020. Online available at: < https://www.mei.edu/publications/trans-adriatic-pipeline-why-it-matters-and-what-comes-next

[174] Trans-Adriatic Pipeline (TAP) project. Online available at: <https://minenergy.gov.az/en/layiheler/cenub-qaz-dehlizi_2196>

Partnership and Cooperation Agreement dated 1996, also notes energy cooperation and its principles between the parties. Article 43 of the Agreement focuses on Legislative Cooperation, and so does this research material, the parties acknowledge that creating compatibility between the current national legislation and future legislation to be harmonised with EU legislation and standards is an important condition for strengthening economic cooperation between the EU and Azerbaijan. Azerbaijan will endeavour to gradually align its legislation with that of the European Union. Competition law is another area characterised by such objects[175].

Energy security for any country, as well as for the EU countries, is not possible without international legal cooperation. Article 2 of the 1994 Energy Charter states that it is necessary to establish a legal framework to facilitate mutual energy provision and long-term cooperation[176].

As a widely debated, how the harmonization of national laws can pose threats to general domestic legislation?

The concept of energy security for EU countries must identify potential threats to national energy security. This security breach can be caused by two forms — internal and external. To address both threats, the use of new and endless sources of energy in the use of energy supplies should be defined as a key priority. Energy security should be expressed in a more specific manner in the EU's energy strategy, including the country, its citizens, society, the state, and the economy's continued protection with fuel and energy supplies. Energy security typically refers to the physical protection of infrastructure, per the ECB. The ECB has also established standards for regulating energy consumption. According to the Green Paper published by the European Commission in November 2000, continuous energy supply is understood to be continuously entering the market at affordable prices for all manufacturers. The energy security of individual states is not possible without international legal cooperation[177]. In this regard, the cooperation between the EU and Azerbaijan in the field of energy security is commendable. It should be viewed as one of the international legal provisions for regional peace and security to encourage its utilisation. Except for

[175] Article 43 of the EU-Azerbaijan Partnership and Cooperation Agreement, 1996. Online available at: <https://investmentpolicy.unctad.org/international-investment-agreements/treaty-files/2453/download>
[176] Article 2 of the European Energy Charter.
[177] Green Paper towards a European strategy for the security of energy supply by European Commission, Brussels, 29.11.2000 COM(2000) 769 final. Online available at: < https://aei.pitt.edu/1184/1/enegy_supply_security_gp_COM_2000_769.pdf>

the revival of the oil industry and direct economic gains, the Contract of the Century and the subsequent agreements have created a favourable climate for the promotion of economic growth. Companies from the United States, Russia, England, Turkey, Saudi Arabia, and Norway are members of the consortium, which has increased Azerbaijan's scientific and cultural ties. Key mechanisms have been identified, including the creation of a productive market environment, the support of strategic initiatives by entities, the establishment of an investor-centric climate, and technological innovation flexibility. Natural gas is becoming a preferred fuel in the European energy market thanks to ecological productivity and increased nuclear energy inequality. Germany, a significant consumer of Russian gas, requires more natural gas as it prepares to abandon nuclear energy. It was reported that in 2011 Europe's annual gas consumption was approximately 500 billion cubic metres, of which 125 billion are imported annually from Russia. With 155 billion cubic metres, this number represented 40 percent of the EU's natural gas needs in 2021, following a dramatic increase within a decade. By 2022, this number decreased by nearly two-thirds[178]. Since the beginning of the war which resulted in the invasion of Ukraine's border lands by Russia, the EU has enforced a prohibition on the importation of Russian coal and oil transported by sea from Russia. Notwithstanding this, imports of Russian gas have not been subject to similar limitations. As mentioned in the previous chapters, this was an obvious example of using energy resources as a political weapon to achieve targeted goals.

While examining the existing problems and various perspectives on the evolution of Azerbaijan's energy security and its legal framework considering its partnership with the EU, it would be essential to evaluate fossil fuel energy transportation issues. Numerous factors have contributed to the need for international legal regulation of transit transportation of energy resources. Inequality in the geographical distribution of energy resources, the physical characteristics of energy resources, their transportation costs, the need to diversify supply sources, the degree of self-sufficiency, etc. are facts that impact transit. These variables have a substantial effect on transit options and, consequently, their international legal regulation. The international transport of energy carriers via pipelines is therefore one of the issues to which the state accords

[178] LIBORERIO, J. *EU purchases of Russian LNG up 40% compared to pre-war levels, new study finds*. Published on 30/08/2023. Online available at: < https://www.euronews.com/my-europe/2023/08/30/eu-purchases-of-russian-lng-up-40-compared-to-pre-war-levels-new-study-finds#:~:text=In%202021%2C%20the%20EU%20imported,oil%20imports%20by%20around%2090%25.>

strategic importance. The same approach and issues can be applied concerning environmental issues. As a result of the expansion of the use of natural resources for energy production, as well as the increase of negative impacts on the environment necessitates the improvement of legal standards. Oil and natural gas are unquestionably the most important energy carriers due to their high consumption rates. One of the primary goals of the state's energy strategies must be ensuring environmental protection while stimulating economic growth.

The significance of the international legislative framework for regional energy security mostly derives from the existence of competing priorities among states within the region. The unequal distribution of energy resources in the world, the lack of investment and funds, and increased demand for energy resources (as industrialisation enters a new phase in the twenty-first century, which has further expanded the trade of energy products) necessitate a proper regulatory and legal approach for guaranteeing safe delivery of these resources from producing nations to consumer markets. Regional state interests must be negotiated through international legal cooperation as a primary means of preventing this issue. Involvement of international laws and guidelines should be implemented for this purpose. These issues are addressed not only for fossil fuel energy resources but also for renewables. In terms of energy security, a scarcity of natural resources has necessitated collaboration on a larger scale and across a broader geographical area. The emergence of energy security in a more distinct form in modern times is linked to population growth and the tendency for its resources to be depleted. Understanding fundamental legal milestones and the establishment of complex frameworks acquired by countries in the carbohydrate resources will aid in the development of renewable energy networks on a global scale, as well as in the coordination and management of their development in a complex and experienced manner.

Existence of life is closely related to energy supply. Human needs can only be met under the conditions of obtaining energy; in other words, the more easily and affordably energy can be obtained, the higher the quality of human life. Although the European Energy Charter of 1951 and the Energy Charter Treaty of 1994 do not directly address the human rights aspect of energy security, their general content serves this objective. In democratic states, the institutional arrangements of the political regime are contingent upon the inviolability of property rights, the existence of economic competition, and the establishment of a legislative foundation that ensures

anti-corruption and anti-monopoly activity. These measures are one of the most important aspects of democratic development.

The social aspect of energy supply and operations is more detailed and complexly regulated in EU law and its normative base. Experience in Western European countries within this field is profound. This is primarily because related projects are supervised by the EU. Furthermore, oil delivery, tariff issues, technical issues, and environmental issues are all regulated in a linked chain. It is reasonable to assume that, in the near future, there will be no significant differences between the laws of the various states in this area, given the current state of globalisation. Multiple legal systems govern international oil and gas pipelines, which occasionally collide with one another. Thus, consistent, and uninterrupted transport of energy resources is essential to ensuring energy security, which is only possible with a solid legal foundation.

Harmonisation from Perspective of Azerbaijan

Azerbaijan should protect its strategic interests as an energy-rich nation. The energy diplomacy of Azerbaijan is conducted at the bilateral and multilateral (regional) levels within the country's energy diplomacy. In addition to the production of energy resources and their export to the global market, it is of some importance that it become an energy transit nation. The country's advantageous location in the geographic heart of the ancient Silk Road makes it a prime transit hub. Transit and transportation applications, frequently encounter time-consuming customs procedures, which points to the need for the development of national legislation especially in this area. Considering that the Russian Federation continue operating in the energy sector of the region, there is intense transit competition between the countries. Currently, cooperation with the EU is receiving more attention. Not only the neighbouring states, but also the EU, the United States, and OPEC members are interested in the route that Azerbaijan's energy exports will go through to the global market. The creation of alternative energy corridors for the EU and the United States is crucial for energy security.

On June 27, 2012, Heads of Azerbaijan and Turkey signed the Intergovernmental Agreement between the Government of the Republic of Turkey and the Government of the Republic of Azerbaijan concerning the Trans-Anatolian Natural Gas Pipeline System (TANAP)[179]. The pipeline

[179] Trans-Anatolian pipeline (TANAP). Online available at: < https://www.sgc.az/en/project/tanap>

should carry gas from Shah Deniz gas field to the Turkey and Europe through Greek border. At that time, it was the project which would provide new opportunities for the Trans-Caspian gas pipeline. The length of the pipeline is 1793 km which has been constructed since March 2015 with a groundbreaking ceremony. TANAP is undoubtedly the greatest opportunity for Azerbaijan to strengthen its position as an integrated and secure transit state in Europe's energy markets. Alongside the primary pipeline, two auxiliary pipelines comprise a segment of the comprehensive pathway. The South Caucasus Pipeline (SCP), which arrives in Turkey via Azerbaijan and Georgia, is the initial pipeline under consideration. The Trans-Adriatic Pipeline (TAP), which arrives in Southern Italy via Greece, Albania, and the Adriatic Sea, is the second. The final 'golden weld' operation between the TAP and the TANAP was effectively completed in November 2018. As a result, a physical connection was established between the two pipelines[180].

The TANAP project will have a positive impact on Turkey's economic growth by gradually diversifying gas supplies and strengthening drill security. Furthermore, the project will establish new trade ties with European countries, bolstering both regional powers' influence in the world's energy markets. The estimated cost of the TANAP project is 8.5 billion USD, which has been construed with the funding opportunities of IBRD with 800 million USD. The project has gone through three phases starting from Phase 0- in 2018, Phase 1- in 2019, Phase 2 to meet the targeted 24 billion cubic meters by 2023, and Phase 3 which is expected to be finalized by 2026[181]. By 2020, the belt's annual output capacity was 16 billion cubic meters, whereas in 2023, this number was 24 billion cubic metres. In 2026, the figure predicted to reach to be 31 billion cubic meters.

Governments also reached an agreement that the Republic of Azerbaijan legally must own at least 51% of the TANAP project[182]. Article 11 of the Agreement states that any failure or refusal by the state to take all necessary actions in fulfilling the obligations defined in this agreement or to ensure the rights and provide assistance is considered the fulfilment of that state's obligations under this agreement.

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[180] TANAP: Vital Legal Considerations When Establishing Significant Energy Projects in Turkey. Online available at: <https://kilinclaw.com.tr/en/tanap-vital-legal-considerations-when-establishing-significant-energy-projects-in-turkey/>

[181] TANAP. Global Energy Monitor. Online available at: <https://www.gem.wiki/Trans-Anatolian_Gas_Pipeline>

[182] AZAKOV, S.I. *Contribution of Azerbaijan to the energy security of the European Union*. 2018 IOP Conf. Ser.: Mater. Sci. Eng. 459 012011, pp. 10-11. Online available at: < https://iopscience.iop.org/article/10.1088/1757-899X/459/1/012011/pdf>

III.III. THE PRODUCTION SHARE AGREEMENT (PSA) AND POWER PURCHASE AGREEMENT (PPA) AS THE MAIN CONTRACTING MODELS IN ENERGY PROJECTS. CASE STUDY OF THE REPUBLIC OF AZERBAIJAN

Summary

Subchapter III.III evaluates PSAs as the primary contracting model in oil and gas projects and PPAs in renewable energy projects as a case study of the Republic of Azerbaijan. It also investigates whether the contractual provisions in PSAs provide legal security for long-term projects and evaluates their compliance with EU law. The analysis also covers various oil and gas exploitation and production contract models, with a particular emphasis on how governments provide stability and guarantees in the face of dynamic changes in the international political arena. Additionally, the section discusses possible approaches for renewable energy PPA contracts, considering the industry's shifting dynamics and renewable energy projects.

Changes in the global economic system have also necessitated the development of free trade and the emergence of an international energy security concept, amongst other factors. International law safeguards human rights, energy security, mass migration, etc against the threats occurring due to the global dynamics. As the strategy for supplying hydrocarbon supplies gains importance and the network of international pipelines expands by its infrastructure, there is also a greater emphasis on legitimate transmission regulation. Because international oil pipelines carry an international and transboundary nature, their regulatory governance is established by international legal principles. Such governance is formulated with intergovernmental agreements on transportation, transit, investment, environmental protection, etc. Because natural gas and oil supplies are located geographically unevenly in the world, properly structured international cooperation has a crucial balance on the stability of the world energy market. Although the Caspian region's natural gas reserves are varied in size, and its proven gas reserves in this region are estimated to be between 236 and 337 trillion cubic feet, while those in North America are estimated to be 300 trillion cubic feet. According to scholars, the existence of 300 trillion cubic feet of undiscovered gas reserves is a distinct possibility[183].

[183] BERNARD, S. *Europe and the development of energy resources in the Caspian Sea region*. Report to Committee on Economic Affairs and Development, Dec. 2002, Doc. 9635. Online available at: < https://assembly.coe.int/nw/xml/XRef/X2H-Xref-ViewHTML.asp?FileID=9934&lang=EN>

Increased demand for energy supplies in the world economy requires more active government cooperation in the use of energy supplies. Azerbaijan's role in maintaining energy security not only in the region, but for the EU is expected to become more intense. Natural gas from Azerbaijan will be especially important to these markets in Europe's energy consumption, as the region's reliance on Russia decreases. Currently, seven pipelines on various routes export Azerbaijan's oil and gas reserves to the world market which we have briefly discussed in previous chapters. The priority interests of leading nations in global politics are the effective exploitation of energy supplies and influencing this area. In a globalized world, superpowers are no longer fighting for territorial land but for the seizure of the exploitation of energy supplies.

Throughout the study, we have covered a wide range of topics, such as the significance of the agreements made between the EU and Azerbaijan, the history of energy law and security in both regions and the evolution of the legal framework governing these topics. However, it is essential to comprehend the legal framework governing such projects. We will go over the following questions to get a solid understanding of the legal parameters of oil and gas projects:

- *What are the common contractual arrangement models for oil exploration, operations and related activities between parties?*
- *How do these contracts guarantee legal security for multinational corporations and regional energy security?*
- *How do governments legalize their shares during the projects?*
- *What kinds of legal, regulatory, and fiscal regimes are to be applied during PSA implication?*

To utilise and manage their carbohydrate resources, governments implement a variety of legal approaches. Some countries handle their extraction, transportation, and other operations via state-owned corporations (i.e Mexico, Saudi Arabia, Venezuela, etc). Other nations form partnerships with private investors for oil-related activities through government-owned companies (i.e Russia, UK, USA). And third category of countries using a mixed approach with both of the above methods, either explore their oil field and other carbohydrate resources on their own or cooperate with investors while conducting operations with them (i.e. Azerbaijan, Kazakhstan, and mostly post-

Soviet countries)[184]. Typically, governments seek to maximise the utilisation of their natural resources so that economic growth, employment opportunities, the attraction of innovative technologies, and the increase in the number of skilled citizens all reach their highest levels. However, from a financial standpoint, it increases its margins through shares in the projects, which are enforced by three distinct instruments: a) oil company stock equity shares); b) production share agreements; and c) financial instruments.

As we have previously discussed, energy security and energy law in general have intricate connections with other areas of law, such as environmental, tax, contract, constitution, dispute resolution, maritime, and others. The primary goal of this subchapter is to analyse the legal frameworks of oil and gas projects from the vantage point of contract law and dispute settlement law.

Several contract models are primarily used for the exploitation, development, and other related operations of oil resources. These contracts are concluded between operating parties and governments that are the owners of natural resources:

1) Concession Agreements;
2) Production Sharing Agreement (PSC or PSA);
3) Joint Venture;
4) Service Agreements (SA);
5) Unitisation Agreements. [185]

Before examining conceptual elements of the PSA agreement as the main legal framework of the oil projects mentioned in this research, which is the predominant contracting model used in Azerbaijan, it is essential to fully comprehend the principal characteristics of other contracting models.

Concession Agreements: Concession or licencing agreements have experienced significant development from their beginning as horizontal contracts in the early 1900s when numerous resource-rich nations were dependent on, protectorates of, or colonies of other empires or

[184] RADON, J. *Covering Oil. A Reporter's Guide to Energy and Development.* Open Society Institute, New York, 2005. pp.61-62. Online Available at: < https://www.opensocietyfoundations.org/uploads/8a632647-ad24-43ac-a4b8-892b97b62119/osicoveringoil_20050803.pdf>

[185] HARRAZ, H.Z. *Petroleum Laws. Types of International Petroleum Contracts*. Online available at: < https://www.slideshare.net/hzharraz/topic-4-types-of-petroleum-contracts-agreement>

governments. There are two key concepts which must be established besides other regulations within the contract: a) the way of distribution of the rents (profits) between the hosting government and participating companies; and b) how occurring costs will be treated. While created, these contracts frequently provide an oil company with the sole authority to investigate, cultivate, distribute, and export petroleum or minerals derived from a certain region for a designated period. This form of agreement is prevalent across the globe and finds popular application in countries including Kuwait, Sudan, Angola, and Ecuador. To obtain licences for these rights, organisations participate in competitive bidding, wherein their proposals may contain signing bonuses or other inducements.

As previously stated, Concession Agreements became the primary tool of host countries for the exploration and production of hydrocarbon resources in the early twentieth century. However, this model is typically defined by four futures: First, rights granted to oil companies to explore vast national areas. Second, the majority of the contracts were signed over a period of more than 60 years. Third, the contractor had complete and direct control over the project's timetable and the amount of required production. Fourth, the host government was not required to produce anything. For example, in 1901, the Shah of Persia granted William D'Arcy a concession to conduct exploration on 500,000 square metres of land for a period of sixty years. As part of the agreement, the corporation agreed to transfer to the government a 100,000$ ownership interest in the company, a 16 percent royalty, and 100,000$ in a settlement. Similarly, in 1933, Standard Oil of California and the King of Saudi Arabia signed a contract in which the foreign contractor agreed to pay the King 50,000 pounds in gold in exchange for a 66-year concession over an area of 500,000 square metres. Following the 1939 concession, Abu Dhabi granted a consortium of five prominent oil corporations the right to conduct countrywide exploration for 75 years. Nevertheless, issues such as the extent of power granted to the contractor, the delineation of revenue shares, and the participation of foreign companies in the country's production have surfaced in the development of PSAs and other agreement models[186].

Joint Venture

[186] BINDENMANN, K. *Production-Sharing Agreements: An Economic Analysis.* Oxford Institute for Energy Studies. WMP 25, ISBN 1901795152, Oct. 1999, pp.9-10

Joint Ventures (JVs) have gained significant traction as a contracting model across diverse business sectors, extending beyond the exploitation, exploration, production, and transportation of carbohydrate resources. JVs are commercial agreements between two or more contracting parties to achieve a common profit on a particular task, business, project, or objective. Frequently, these types of establishments entail critical risks. In addition, the involved parties frequently reach a consensus to collaborate and pool their expertise and technologies in pursuit of the specified objective. Therefore, such contracts must be well-tailored to identify and control risks, as well as specify appropriate mechanisms for resolving internal disputes. Because business partners on JV rely on one another for help and assistance, the failure of one partner can severely harm the other. JV establishments have witnessed cases of this nature during the COVID-19 pandemic. Claims have arisen by operating partners triggered by the failure of another partner of JV. Such claims were due to unanticipated cash flow and operational deficits[187].

JVs are regarded by the majority of governments as one of the viable contracting models for business operations in terms of the development of national expertise. With the assistance of JVs, usually developing countries can ensure technology transfer, increase the number of skilled citizens on their soil, and implement innovative solutions. A significant example of the JV model in the oil and gas industry is the collaboration between Shell and Gazprom, a state-owned oil company in Russia. Exploration of Sakhalin, Sakhalin-2 liquefied natural gas facility, Gydan energy venture, and development of Salym oil fields were all components and objectives of this joint venture[188]. JVs are regarded by the majority of governments as one of the viable contracting models for business operations in terms of development of national expertise. With the assistance of JVs, usually developing countries can ensure technology transfer, increase the number of skilled citizens on their soil, and implement innovative solutions. A significant example of the JV model in the oil and gas industry is the collaboration between Shell and Gazprom, a state-owned oil company in Russia. Exploration of Sakhalin, Sakhalin-2 liquefied natural gas facility, Gydan energy venture, and development of Salym oil fields were all components and objectives of this joint venture.

[187] ANDERSON, D. *Joint Ventures in Megaprojects: Strategic Positioning for Challenging Times*. Online available at: <https://systech-int.com/insights/thoughts/joint-ventures-in-megaprojects-strategic-positioning-for-challenging-times>

[188] *Shell intends to exit equity partnerships held with Gazprom entities.* Official website of Shell Global. Online available at: <https://www.shell.com/media/news-and-media-releases/2022/shell-intends-to-exit-equity-partnerships-held-with-gazprom-entities.html>

Nevertheless, as a consequence of the Russian military's aggression towards Ukraine, which is considered a critical threat to the energy security of the EU, Ben van Beurden, the chief executive officer of Shell Group, declared the Board of Shell's decision to withdraw from all joint ventures and ongoing projects in Russian territory.

Services Agreement (Contracts) (SA)

Service agreements (or service contracts) firstly used in Latin America in 1950s. Risk service contracts, pure service contracts, and technical assistance contracts are the three primary forms of service contracts. In order to avoid other contracting models for utilising national carbohydrate resources, this model is mostly used in countries where national rights and sovereignty have been highlighted. Thus, in this model, a host government hires the services of international oil companies for both financial and technical expertise, while giving him the legal status of contractor rather than partner, as in other models. The rights to exploited resources are always retained by the states. Service contracts, as opposed to modern concessions, PSAs, and JVs, are thought to be a mechanism through which the host government has the most control over a given undertaking. As previously stated, such models are widely and preferentially used in regions experiencing rising nationalism and greater assertiveness of national interests in international politics. Mexico, Iraq, Iran, Venezuela, Ecuador, and other countries fall into this category[189].

Unitisation Agreement

Allocation of carbohydrate resources may cross the identified areas of two contracting parties, raising concerns about statutory requirements. Unitization refers to the process by which the interest owners in the adjacent contract groups collaborate to build the straddling pool. Independent bridging reservoir development by neighbouring contractors is generally less cost-effective and efficient than joint development. This is a fundamental principle of unitization; the spanning reservoir is physically generated as if the boundary between the contract zones did not

[189] KABUYE, I. *Model Contracts and Licensing in the Oil and Gas Industry.* Professional Lecture at SPE Uganda Section, 15th December 2021. Online available at: <https://higherlogicdownload.s3.amazonaws.com/SPE/f5f1e5d2-bfcf-402c-9b86-0416be96c909/UploadedImages/Model_Contracts_and_Licensing_in_the_Oil_and_Gas_Sector_Presentation.pdf>

exist. Unitized contracting areas are frequently located within a single country, and the unitization method must be carried out following that country's laws. Reservoirs are rarely located across an internationally agreed-upon border between two countries or within a jointly developed territory where the line has not been determined; in such cases, the legal regimes governing unitization in the two host countries are likely to differ. Both parties to the conflict must work together. Thus, unitization is the establishment of a uniform development and utilisation plan provided by all reservoir owners. This agreement must cover exploration, appraisal, cost allocation, and any other important aspects of the unitization area.

Production Share Agreements (PSA or PSC)

It should be noted that the PSA is of particular importance to the various forms of contracts used in oil operations. The advantages of the PSS should be attributed to the government's right to a portion of the crop when the government becomes the owner of part of the product, which is very important in the current climate when the price of oil rises. Here the government does not attract its resources to obtain this product and uses it as it pleases by owning a ready-made product. The use of this model in the field of oil production is promising and economically viable. PSA was first introduced in Indonesia in the 1960s to attract investors for oil extraction. Following that, this model was widely adopted in a variety of countries. Such fundamental state-investor structures have begun to be used in Angola, Vietnam, Libya, Egypt, Malaysia, Peru, Syria, and CIS countries including Azerbaijan[190].

The presence of numerous sub-industries within the petroleum sector is a major point to be highlighted. The petroleum industry is divided into three segments: First segment is involved in the exploration, extraction, and production of crude oil and natural gas known as "upstream", the second segment is involved mainly in transportation activities (by pipeline, rail, oil tanker or truck), storage, and wholesale marketing of crude are known as "midstream", the third segment is involved in value-added refinery (oil tankers, refiners, retailers, and consumers) which called as "downstream". In addition, the oil industry was divided into four distinct corporations. National Oil Companies (NOCs), International Oil Companies (IOCs), Operators, and Service Providers.

[190] DR.PALIASHVILI, I. *Seminar on the Legislation on Production Sharing Agreements*. September 14, 1998. Online available at: < http://www.rulg.com/documents/the_concept_of_production_sharing.htm>

Considering the foregoing, it is predictable that oil companies in developing countries would seek to exploit their country's petroleum reserves—a pursuit that necessitates financial capital and access to specialized knowledge. To acquire these materials, a collaborative effort with a multinational oil corporation is required. The successful completion of the project requires the agreement of both parties to be mutually advantageous. The structure of this agreement may involve the application of diverse contract formats, depending on the national objectives of developing countries and the interests of the IOC. A legal agreement that mainly stipulates comprehensively all these elements is the PSAs[191].

PSAs are distinguished from other types of contracting models by two characteristics: a) The contractor is responsible for all exploration and development risks. Furthermore, if no oil is exploited or discovered in the targeted area, the government does not compensate the contractor; b) the hosting government retains its rights to the resources and the installations made by the contractor[192]. Regardless of the approach by which the contractor bears the risk, the hosting government typically faces a risk as well. The NOC often contributes a portion of its profits as "share capital" to the joint ventures responsible for the PSA-granted region through its investment in the consortium. Frequently, the costs associated with the initial contribution of the host government are "shared" by the other companies. Under the terms of the PSA, this carrying cost will be recovered by the consortium from future revenues generated by the host government.

[191] HASSAN, S; JELILI, Y. A.; DHALI, M.; MEHAR, S.M. *Contract Structure of Production Sharing Agreement by International Oil Company in Exploration of Petroleum Resources in Developing Countries.* 26 December 2022, doi:10.20944/preprints202212.0489.v1, pp. 4-5.
[192] Ibid.

Type of contract	Cost and risk	Exclusive right to operate	Right to production
License / concession {or Concession (**Tax-and-Royalty**) Contracts}	Private company	Private company	Private company
Joint venture {or Participation/ Association (or Arrangements)}	Private company	Shared	Shared
Production sharing {or Product Sharing Contract/ Agreement (PSC/PSA)}	Private company	State	Shared
Service contract	Private company	State	State

Figure 5. Parameters of international petroleum contracts[193]*.*

As a fundamental understanding of PSAs, it involves a governing body, with the host government generally being represented by the Ministry of Petroleum, the Ministry of Oil and Gas, or an equivalent ministry responsible for matters about natural resources and a second party acts as a contractor (investor). The contractor may consist of a solitary IOC or a consortium of IOCs, contingent upon the cost and risk associated with the area in question. Consequently, the IOCs themselves may participate independently or as part of a consortium, depending on the circumstances. The NOC acts as an intermediary between the contractor and the host government or the Ministry of Petroleum. Consequently, the NOC performs, in some cases, day-to-day monitoring of these contracts or agreements on behalf of the government. In certain circumstances, the NOC may also form a joint venture partnership with the contractor, either from the outset or if they hold a carried interest, back-end option, or carried interest that grants them the right to become joint venture partners upon exploration, exploitation, and production.

- *What are the different factors and variables that are used in PSAs?*
- *To what extent should the most important and relevant legal components be stipulated in the contract?*

Aside from the factors mentioned, there are several other components worth mentioning. Aside from parameters such as the cost and profit of explored oil, royalty, and income tax, tax

[193] HARRAZ,H. *Petroleum Laws: Types of International Petroleum Contracts*. 2016, ISN 10.13140/RG.2.1.1357.4007. Online available at: < https://www.researchgate.net/publication/301848692_PETROLEUM_LAWS_TYPES_OF_INTERNATIONAL_PETROLEUM_CONTRACTS/citation/download>

holidays, bonuses, there are usually clauses defining duration, bonuses, duties, pricing, marketing, termination, warranties, compensation, dispute resolution, and prevailing laws.

Important elements for binding the contractor and the hosting government include the applicable law, the duties and responsibilities of the parties, termination clauses, and dispute settlement mechanisms. In the event of a dispute between the parties, it is common practice for PSA agreements to call on the services of an impartial third-party expert. If the dispute cannot be resolved through the experts, the contract provides for and identifies international arbitration as the dispute resolution mechanism. Key risks, including non-delivery of works, inadequate cost control, and inability to enforce, must also be specified and defined within the relinquishment clauses of the PSA[194].

The duration of the contract is a fundamental aspect of PSAs that is mutually discussed by the parties. Although standard contract durations can reach 30 years, exploration typically lasts between three and five years. It has been noted that the involvement of relinquishment clauses can extend the duration of contracts by as much as 40 years. The appraisal process typically requires 1 to 2 years. The IOC conducts appraisal wells or delineation once upon discovery to determine the reservoir's extent to calculate commercial viability and field size. The typical duration of this process is between 5 to 7 years, although initial relinquishments may take place as early as 2 years, depending on the field's dimensions. This measure is implemented to deter contractors from accumulating contract areas devoid of substantial exploration or development activity with the intention of generating speculative profits via the sale of participating interests. Afterward, production process commences and lasts for 25 years. Consequently, these are the total contract periods in typical circumstances. Nevertheless, if the exploration and exploitation field is massive, IOCs may divide exploration periods as follows: 5 for the initial exploration period, 3 years for subsequent exploration periods, 2 years for the third exploration period, and so forth. This type of division is necessary because larger blocks necessitate greater investments in exploration, technology, and personnel[195].

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[194] AUKATI, A.; MIROSHNYCHENKO, V. *Production sharing agreements what constitutes a good PSA? Should they be pursued?.* Energy Security Project (ESP) March 24, 2021, Rev B, USAID, pp.4-5. Online available at: <https://energysecurityua.org/wp-content/uploads/2021/04/production-sharing-agreements.-what-constitutes-a-good-psa.pdf>

[195] Ibid, pp. 3

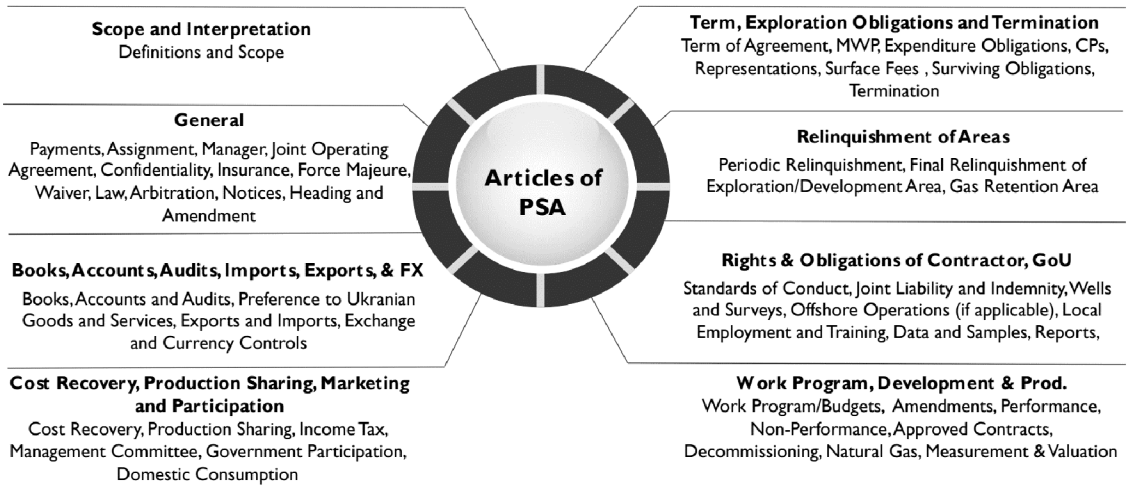
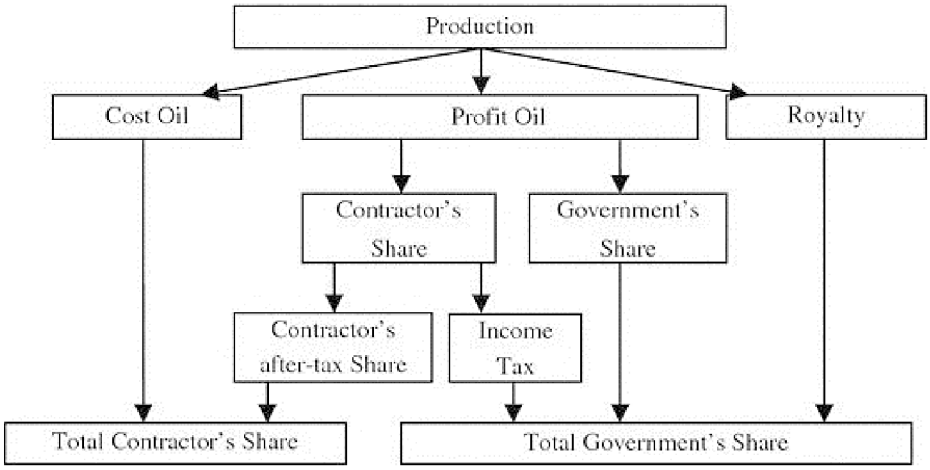


Figure 6. Common PSA contractual legal framework[196]

Typically, a PSA comprises four primary features: The contractor pays a royalty on gross production to the hosting government. He is entitled to a predetermined portion (e.g., 40%) of production for cost recovery after the royalty has been deducted. Subsequently, profit oil, which comprises the residual production, is equitably distributed between the contractor and the government (e.g., the contractor receives 35 percent and the government retains 65 percent). The contractor's share of the profit oil is obliged to subsequently be subject to income tax[197].



[196] Ibid. p.7

[197] BINDENMANN, K. *Production-Sharing Agreements: An Economic Analysis*. Oxford Institute for Energy Studies. WMP 25, ISBN 1901795152, Oct. 1999, pp.1-2

Figure 7. Features of Production Share Agreement[198]

> *In light of the large number of investments, one of the primary research questions that need to be examined is how the PSA Agreement can guarantee legal and fiscal stability when the international political arena is constantly subject to unexpected events and changes.*

According to the analyses and conclusions of the study, the PSA is the supreme form of contractual arrangement for the exploitation, exploration, and production of carbohydrate resources that are owned by host governments. PSA establishes its primary law, which is construed and based on the terms and conditions agreed upon between the contracting parties, in contrast to concession and other oil and gas contracting models, which are governed by national laws (energy law, subsoil law, etc.) of the located resources. It is also observed that national laws are always subject to change and modification. These terms include stability clauses that guarantee the IOC will not be subject to any kind of political, regional, or economic pressure. Such an investor climate creates for businesses what is named a "safe legal cloud" in which they can conduct their operations free from the influence or bureaucratic requirements imposed by national laws. Conversely, as previously mentioned, PSAs designate International Arbitration as the mechanism for resolving disputes, whereas Licences are subject to national legislation and local courts which can cause conflict of interests during disputes. This type of protection of rights in PSAs creates confidence and security in the contractor, thereby encouraging long-term investments.

An additional aspect that has been previously stated is that the hosting government obtains assets and facilities from the contractor under the PSA once the costs have been reimbursed through this cost-recovery phase. In essence, the contractor (IOC) is not required to hold ownership of the assets that are acquired and utilised in the course of the production. The contractor can surpass extra logistics and amortization of expenses, resulting in a significant surplus as properly

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[198] GUPTA; VIJAY; GROSSMANN; IGNACIO. *Offshore Oilfield Development Planning under Uncertainty and Fiscal Considerations. Optimization and Engineering*. 2017. ISN 18.10.1007/s11081-016-9331-4. Online available at: <https://www.researchgate.net/publication/268394450_Offshore_Oilfield_Development_Planning_under_Uncertainty_and_Fiscal_Considerations/citation/download>

evaluated. Projects that operate under licencing regimes do not provide the contractor with any such benefit; instead, the licensee retains ownership of all facilities, property, and developed technologies. The host government's active involvement in the project's management through the PSA's Steering Committee is another benefit that suggests a favourable environment for the contractor's operations. Supporting out with topics like communicating with state authorities, procurement, and obtaining necessary approvals for alterations to project structures.

The PSA regime as a key host government agreement for the exploitation, exploration and production of oil and gas resources. Azerbaijan Case.

After gaining a fundamental legal understanding of the contractual structure of PSAs, it will be analysed using a case study from the perspective of Azerbaijan PSAs as a practical application of this regime. As has been briefly discussed in the previous chapter, the development of Azerbaijan's petroleum sector is mainly influenced by foreign investments operating in the country. The legal base of such investments in the country is established on the PSAs. The country has progressively implemented several significant laws that apply to the oil and gas sector, protection of foreign investments, privatisation, taxation, dispute settlement, migration, foreign exchange, banking, and arbitration, among other areas, to establish an attractive investment climate for the foreign investments and create a fundamental legal regulatory and institutional framework. Despite the ratification of these laws and the establishment of a set of associated legal frameworks, the oil and gas industry remain in a state of transition. Thus, it is vital to enact new legislation and amend existing regulations on the oil and gas sector, petroleum contracts, and transit pipelines. The country possesses the most advantageous oil and gas conditions among neighbourhood Caspian nations; consequently, over 30 IOCs are operational in the country. Azerbaijan generated $33.6 billion only from oil and gas exports in 2022, according to the figures from the State Customs Committee[199].

[199] ISAYEV, H. *Azerbaijan enjoys surging hydrocarbon revenues amid Ukraine war.* Jan.2023. Online available at: < https://eurasianet.org/azerbaijan-enjoys-surging-hydrocarbon-revenues-amid-ukraine-war#:~:text=According%20to%20the%20latest%20data,the%20same%20period%20of%202021.>

ACG PSA (for the Azeri, Chirag, and deep-sea sections of the Gunashli fields)[200] and Shah Deniz PSA (for the deep-sea section of the Shah Deniz Gas Perspective fields)[201] are the PSAs which fundamentally frame Azerbaijan's current petroleum legislation system. The extensive operational, legal, and financial coverage of these projects, which proceeded in 1996, set a legal precedent for subsequent PSAs in the nation and created guidance for significant growth. As per the ACG PSA, the principal constituent of oil exported through the pipeline is crude oil. Baku-Tbilisi-Ceyhan Oil Pipeline (BTC) connections to international markets; natural gas supplied to Turkey and Georgia is derived from natural gas produced under the Shah Deniz PSA. Commencing in December 2020, natural gas at plateau 16 billion cubic metres is transported from Azerbaijan to Europe via the 'Southern Gas Corridor' integrated gas pipeline system in the second stage of Shah Deniz[202].

The legal structure governing the PSA regime in the Republic of Azerbaijan is predominantly derived from the foreign investment law, which acknowledges the existence of "concession agreements" within the natural resources industry[203]. This law serves as the foundation for the functioning and implementation of PSAs within the sovereign country[204].

Understanding of ratification, acceptance, and approval procedures of PSAs, is as important as its contractual structure itself. Before the actual execution of the PSA, a series of legal procedures must be strictly followed by the parties. The host government and the IOC start initial negotiations which leads to mutual agreement regarding the terms and conditions of the PSA. To accomplish this, the contractual parties engage in direct discussions through their official representatives (Head of Ministry of Energy, NOC, CEO of IOC, etc.). A comprehensive understanding of the agreement's provisions is vital for both parties, given that it represents a document that has been mutually

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[200] Agreement on Joint Development and Production Sharing for the Azeri and Chirag Fields and the Deep-Water Portion of the Gunashli Field in the Azerbaijani Sector of the Caspian Sea between the State Oil Company of the Azerbaijan Republic, Amoco Caspian Sea Petroleum Limited, BP Exploration (Caspian Sea) and others. 20 Sep. 1994. Online available at: <https://www.bp.com/content/dam/bp/country-sites/en_az/azerbaijan/home/pdfs/legalagreements/psas/acg_psa.pdf>

[201] Agreement on the Exploration, Development and Production Sharing for the Shah Deniz Prospective Area in the Azerbaijan Sector of the Caspian Sea between the State Oil Company of the Azerbaijan Republic, BP exploration and others. 4 Jun. 1996. Online available at: < https://www.bp.com/content/dam/bp/country-sites/en_az/azerbaijan/home/pdfs/legalagreements/psas/sd-psa.pdf>

[202] Official website of Southern Gas Corridor. Online available at: <https://www.sgc.az/>

[203] MUSTAFAYEV, N. *Production-sharing agreements in the petroleum industry of Azerbaijan.* The Journal of World Energy Law & Business. 8. ISN jwv017. 10.1093/jwelb/jwv017. 2015, pp. 4-5

[204] Article 40, Law on the Protection of Foreign Investments of the Republic of Azerbaijan. Online available at: <https://investmentpolicy.unctad.org/investment-laws/laws/9/print/3>

established under their consent. No liability may be imposed by one party upon the other. Furthermore, the IOC is given sufficient time to decide on its participation in the project. In case parties decide to execute the PSA, this is accomplished through the initial execution of a memorandum of understanding between the parties, which remains in force for a period of two to three months (subject to the parties' arrangement) following the parties' consensus on the most significant economic terms and conditions governing oil operations in the designated exploration area.[205]After reaching a consensus on the terms of the agreement, the President of the Republic of Azerbaijan issues resolutions granting the NOC (SOCAR) the authority and rights to sign the PSA on the government's behalf.

Authorization of the agreement should be approved by the relevant governing bodies (the Cabinet of Ministers, the Parliament, and the President of the Republic of Azerbaijan, within the sequence) following the execution of the PSA between the NOC and IOC (or consortium of IOCs). From a legal standpoint, this agreement establishes a legally binding guarantee that takes precedence over any other regulations and laws in effect at the time, thereby elevating the highest legal hierarchy of the legislation. PSA stands only underneath the exemption, which is the government's Constitution. Thus, the territory of the Republic of Azerbaijan is governed by the supreme and highest legal order, which is established by the Constitution.

By passing the executed PSA through the Ministries, the Cabinet of Ministers issues a resolution approving government commitment and guarantees to the IOC in connection with the government's alignment with the PSA. Following the resolution, the PSA is presented to the Parliament for review and approval of the law on granting consent for implementing the agreement. The PSA is submitted to the Parliament for examination and approval of law granting consent for the implementation of the PSA, after the resolution given by the Cabinet of Ministers. Afterward, the PSA is signed into law by the President.[206]

[205] Production Sharing Agreement (PSA) by PEPA-Petroleum Exploration and Production Authority of Yemen. Online available at: < https://pepaye.com/int_bids/investment/production_sharing>

[206] MUSTAFAYEV, N. *Production-sharing agreements in the petroleum industry of Azerbaijan.* The Journal of World Energy Law & Business. 8. ISN jwv017. 10.1093/jwelb/jwv017. 2015, pp. 6

Figure 8. Process for PSA approval in the Republic of Azerbaijan.

The legal drafting, approval and adoption of PSAs at the legislative level demonstrates that PSAs are accepted at the highest level, as well as guarantees for the protection of investors are given by the government. Numerous legal scholars hold conflicting views regarding the legal framework and place which PSAs need to be considered. Main contractual and juridical elements included to the PSAs, gives quiet obvious reasons to evaluate it as a law. However, other debates asses the PSAs as a commercial contract, or another form of legal normative act. Advocating the idea that PSAs should be evaluated in the level of law considering its place in legal hierarchy after the Constitution. In addition, it would be inaccurate to dispute the legal enforceability of these agreements, recognising that their adoption constitutes legislation and that any follow-up modifications require parliamentary approval. Furthermore, the PSAs explicitly stipulate that any forthcoming laws implemented by the government shall not be binding on this agreement. For instance, Article 23.1 of the ACG PSA states: "*Upon approval by the Parliament of the Azerbaijan Republic of this Contract, this Contract shall constitute a law of the Azerbaijan Republic and shall take precedence over any other current or future law, decree or administrative order (or part thereof) of the Azerbaijan Republic which is inconsistent with or conflicts with this Contract except as specifically otherwise provided in this Contract*"[207] which is legislative supremacy principle.

Given the foregoing facts, the PSA contractual regime represents a mostly desirable substitute for the development of carbohydrate resources in country. Because it allows the

[207] Article 23.1. Agreement on Joint Development and Production Sharing for the Azeri and Chirag Fields and the Deep-Water Portion of the Gunashli Field in the Azerbaijani Sector of the Caspian Sea between the State Oil Company of the Azerbaijan Republic, Amoco Caspian Sea Petroleum Limited, BP Exploration (Caspian Sea) and others. 20 Sep. 1994. Online available at: <https://www.bp.com/content/dam/bp/country-sites/en_az/azerbaijan/home/pdfs/legalagreements/psas/acg_psa.pdf>

government to avoid any financial obligations associated with exploration risks, additional costs, and joint venture arrangements. Furthermore, it gives the host government authority over the IOC's operations during the project's duration. However, the limited time of economic profitability and lifespan of the carbohydrate resources cause global challenges to the usual implementation of PSAs. In addition, the implementation of energy transition strategies, and the application of green technologies while avoiding fossil fuels to minimise carbon emissions are the main interests for gaining the independence of energy resources and strengthening Energy Security. Both international oil companies (IOCs) and national oil companies (NOCs) are currently shifting their focus to the expansion of renewable energy.

Primary contracting models of Renewable Energy Projects

Primary implemented contracting models related to renewable energy resources in Azerbaijan are Power Purchase Agreements (PPA). As previously mentioned, PSA contracts are the most prevalent type of contract in the oil and gas industry for conducting operations and establishing its legal framework. An analogous trend is discernible in the development of the legal framework governing projects executed within the renewable energy sector. Considering the absence of exploitation and exploitation activities in this field, PPA is the most widely contracting model in this industry. Given that the contractual agreements between the operator and the state may modify the legal framework of the projects in accordance with the quantity of energy generated and the scope of the energy to be produced, this form of agreement does not adhere to consistent regulations and guidelines. Generally, there are three main steps of physical PPAs: (a) On-site PPA; (b) Sleeved PPA; (c) Off-site PPA:

(a) On-site PPA is a power purchase agreement wherein the company procuring the electricity develops a renewable energy project on or in close proximity to the consumers location.

(b) Sleeved PPA involves the participation of a third-party intermediary or utility to manage the contractual and financial aspects of the agreement between the generator and the consumer in a renewable energy project.

(c) Off-site PPAs are agreements in which the power generated by a renewable energy plant is sold to a buyer who is not physically situated at the same location as the generation source. This arrangement enables customers or entities to purchase renewable energy from a remote project and receive it via the grid.

There is also virtual PPA model which is also called Synthetic PPA. This model is a non-physical energy delivery-related financial instrument used to manage the risk associated with project. Frequently, this entails the utilization of financial derivatives or contracts that calculate economic outcomes of the project in relation to the produced energy[208].

The environment suffers from both onshore and offshore exploration and extraction of carbohydrate resources. Subsoil, marine, atmospheric, and animal ecosystems are all being negatively impacted by environmental impacts such as carbon emissions, toxic waste and hazardous contamination, noise disturbance, etc. Effluent water poisoned with solids and chemicals from drilling fluid, oil, and grease is another major pollutant associated with oil and gas exploration and exploitation. All these new developments, the challenges posed by carbohydrate resources while strengthening Energy Security, and the conflicts that have arisen in PSAs will be discussed in the following chapter.

[208] What is a PPA (Power Purchase Agreement)?. Next Kraftwerke Co., Germany (2022). Online available at: < https://www.next-kraftwerke.com/knowledge/ppa-power-purchase-agreement>

CHAPTER IV. EXISTING TENDENCIES AND ENVIRONMENTAL DISPUTES IN PSAS. HARMONISATION OF NATIONAL LEGISLATIONS WITH RESPECT TO THE APPLICATION OF RENEWABLE ENERGY RESOURCES

IV.I. STRENGTHENING ENERGY SECURITY WHILE PRESERVING ENVIRONMENTAL SAFETY

Summary

The subchapter emphasises the environmental consequences of the strengthening energy security through traditional oil and gas exploitation, as well as its relationship to environmental safety, within the context of EU law, energy law, and environmental law. It debates the importance of governments enacting strict legal measures in accordance with international treaties that have a positive impact on reducing negative environmental impacts for the long-term well-being of communities and ecosystems.

Protection of the environment for the prosperity of current and future generations is the foundational core principle of international environmental law. This principle requires states to promote and optimise environmental protection and enhancement, as well as increase responsible resource management, to improve the quality of life on a global scale. Traditional oil and gas companies are encouraged and persuaded to improve their environmental and social governance in the EU and other oil-rich countries to combat climate change, reduce greenhouse gas emissions, and adopt more environmentally friendly practices. This has made it harder for countries like Azerbaijan and its Caspian neighbours to gain access to capital as they generate and mainly focus on their oil and gas industries. The developed countries have imposed more strict requirements and standards on IOCs, as they mainly transition their economy, legislation, and social standards to industries with greater social and environmental benefits and lower carbon intensity. IOCs investments in projects have decreased as a direct result, thereby constraining not only their financial gains but also the revenue of the host governments. An essential component of addressing the complexities of modern life, including global warming, pandemics, wars, and political challenges, the production and utilization of sustainable energy are challenging issues that meeting the needs of future energy consumers will be difficult.

The national goals of governments determine the performance of legitimacy and whether environmental protection policies are implemented and strictly monitored. However, main

practises show that, such standards and requirements are not completely fulfilled by various industries, especially in the hydrocarbon industry, even though most national legislation covers main protection standards in their legal normative acts. As I've already mentioned, the lack of strict protection of environmental requirements in the national legislation in developing countries notably affects the implementation of the PSA agreements of these countries in this regard. So, when evaluating PSA agreements' legal framework and scope, it is important to keep in mind that environmental protection requirements are not always based on the same and unified mechanisms. Mainly, agreements refer to the national legislation, as well as its environmental requirements. From this perspective, it is crucial to harmonise the legislative base of the host government with the highest standards and policies implemented in the oil and gas industry.

When we investigate Caspian Bay countries, including the Republic of Azerbaijan, which rely primarily on the Caspian's extensive carbohydrate resources, we find that only several national laws have been established to strictly control the issues. The proper regulations may establish a framework for environmental assessment and monitoring, delineate the boundaries of geographically managed territories, and designate ecological conditions and species that necessitate special protection. Nevertheless, there has been an absence of substantial endeavours to institute consistent uniform regulations or regional governance mechanisms like such applied in the management of high seas and oceans.

As previously stated, the absence of strict environmental protection requirements in the domestic laws of developing nations has a general impact on their PSA agreements in this context. Therefore, upon examining PSA agreements concerning environmental protection and assessment matters, it becomes particularly apparent that such requirements are frequently not established upon systematic mechanisms. The primary provisions of such protection stipulate that operating (IOC) companies conducting oil extraction and exploration activities must comply with the standards established by national legislation. In the absence of comprehensive monitoring and enforcement of such standards by national legislation, operations in exploitation fields have the potential to inflict environmental harm not only on the surrounding zone waters but also on the marine environment. As an example, Article 26 of the Agreement on the exploration, development, and production sharing for the shallow water area around the Absheron peninsula in the Azerbaijan sector of the Caspian Sea stipulates the legal framework of PSA agreements in terms of environmental standards:

a) international petroleum industry standards, b) experience gained from the exploration and production operations in other parts of the world and c) existing Azerbaijan safety and environmental regulations[209]. I would like to examine this provision in terms of the environmental responsibilities of the parties defined in the PSA, as well as the perspectives of the government's main functions.

In the mentioned Article, the only mandatory and legally binding requirements are covered by the laws stipulated in domestic laws. So, even if the operating company agrees to function within the framework of domestic law requirements, the state should be held primarily responsible for environmental protection and control. Thus, Article 39 of the Constitution of the Republic of Azerbaijan stipulates that everyone has the right to live in a healthy environment[210] and Article 3 of the Law of the Republic of Azerbaijan "On Protection of the Health of the Population" defines the duty of the state: one of the duties of the state in the field of protecting the health of the population is to ensure the protection of the environment, ecological safety[211]. Environmental requirements during resource extraction are primarily governed by the national laws. Environmental safety and healthy life conditions are evidently two of the state's primary responsibilities.

Notwithstanding, is it feasible to protect environmental safety throughout oil and gas operations by referencing to the national laws?

Undoubtedly, to ensure comprehensive control and accountability of these matters, supplementary actions such as ratifying international conventions and implementing regional treaties and implementing stricter standards are required.

Subsequently, the "Framework Convention on the Protection of the Marine Environment of the Caspian Sea" was developed with the assistance of the UN Environment Program with the collaboration of the experts from the Caspian coastal states. Discussions on the text of the Convention officially began in 1995, and they have continued until they encompass all the necessary

[209] Article 26 of the Agreement on the exploration, development, and production sharing for the shallow water area around the Absheron peninsula in the Azerbaijan sector of the Caspian Sea on 22.12.2014 (between the State Oil Company of the Republic of Azerbaijan, BP Exploration Limited and Socar Affiliate). Online available at: <https://www.bp.com/content/dam/bp/country-sites/en_az/azerbaijan/home/pdfs/legalagreements/psas/171214-az-en-swap-psa.pdf>

[210] Article 39 of the Constitution of the Republic of Azerbaijan.

[211] Article 3 of the Law of the Republic of Azerbaijan "On Protection of the Health of the Population".

components that have not been systematically regulated with the national laws of ratifying countries. On November 7, 2003, representatives of the Republic of Azerbaijan, the Islamic Republic of Iran, the Republic of Kazakhstan, the Russian Federation, and the Republic of Turkmenistan met in Tehran, signed the Convention.

The Convention is the first legal agreement among five states that reflects the Caspian Sea region's environmental and marine protection conditions and relevant organizational mechanism. This document is founded on several principles. The "Tehran Convention" aims to prevent pollution of the Caspian Sea's environment from all sources while also protecting, preserving, and restoring the sea's environment. The Convention also includes provisions for the sustainable and efficient use of Caspian Sea biological resources, environmental impact assessment, environmental monitoring, and scientific research[212]. The signing of the convention was made possible by eight years of intergovernmental negotiations within the framework of the Caspian Environmental Program, with the support of the UN Environment Program. The signing of the Tehran Convention, according to former UN Secretary-General Kofi Annan, the first legally binding agreement between all five nations that share the Caspian Sea -- will benefit the health and livelihoods of hundreds of millions of people[213]. The Tehran Convention entered into force on August 12, 2006, after being ratified by the governments of the five Caspian coastal states; this date was later designated as "Caspian Day."

The main goal of this convention was to establish regional monitoring and protection mechanisms to protect the sea environment from pollution, to protect biological resources, to restore them, to use them continuously and effectively. Even though Azerbaijan, as a developing country, has established a regional and national legislative framework, the IOCs occasionally violates the rules. This requires strengthening control mechanisms as well as serious education of local and state institutions in this field.

As previously discussed, host governments control environmental risks through their national laws as legally binding provisions in PSAs, since states have sovereign rights over their

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[212] IRADE, I. *Environmental protection of the sea is one of the priority tasks*. August 12, 2010. Online available at: < http://anl.az/down/meqale/azerbaycan/2010/avqust/avqust/130501.htm>

[213] Press release of United Nations. Secretary-General Hails Signing of Caspian Sea Protection Treaty. Online available at: <https://press.un.org/en/2003/sgsm8984.doc.htm>

natural resources. However, having non-binding regional and international agreements and conventions is critical in terms of marine and environmental safety and prosperity. Several cases throughout history have demonstrated that national laws and their monitoring activities are insufficient to provide full environmental security in PSAs. It is critical to establish minimum international standards in oil and gas exploitation and exploration activities that are based on international practises. One of the events that left a lasting damage on the global oil and gas industry and triggered the advancement of increased supremacy in this sector occurred in on April 20, 2010. An explosion at the BP Deepwater Horizon oil rig resulted in the leakage of an estimated 130 million gallons of crude oil into the Gulf of Mexico. It was the largest oil spill in the history of the United States' waters. As a result of the event, which is considered one of the most catastrophic environmental incidents in the history of the oil and gas industry, eleven workers on the rig died, and millions of fish, sea turtles, and marine life perished. For 87 days, one of the most diverse marine ecosystems was devastated by an oil spill, leaving the planet defenceless. There have been declines in the populations of several species over the past decade. These include deep-sea coral, common loons, and spotted sea trout[214]. After an environmental settlement between the host government and IOC, the $18,7 billion has been agreed to be paid by BP to the U.S.A. It supported the Gulf of Mexico Research Initiative and the Gulf of Mexico Energy Security Act has funded a number of long-term studies examining the effects of the oil spill on Gulf wildlife. It was the largest settlement with a single entity in the history of both the country and the company[215]. This event triggered host governments in the EU and global level to establish a legally binding international agreement which is setting minimum safety standards and establishing liability due to offshore installations and operations.

To protect the deep-sea ecosystem, several international legal frameworks and agreements have been established. The UN Convention on the Law of the Sea (UNCLOS), which was adopted in 1982 and came into force in 1994, provides the legal framework governing all activities in the oceans and seas. It governs virtually every aspect of ocean use, so why it's usually also referred to as *the*

[214] MEINERS, J. *Ten years later, BP oil spill continues to harm wildlife—especially dolphins.* Apr. 17, 2020. Online available at: < https://www.nationalgeographic.com/animals/article/how-is-wildlife-doing-now--ten-years-after-the-deepwater-horizon>

[215] CHILDRESS, S. *BP to Pay Record $18.7 Billion to Settle Gulf Oil Spill Claims.* July 2, 2015. Online available at: <https://www.pbs.org/wgbh/frontline/article/bp-to-pay-record-18-7-billion-to-settle-gulf-oil-spill-claims/>

constitution of the oceans[216]. Part XI of the UNCLOS addresses the protection and preservation of the marine environment, including the deep sea. Among other provisions, protection of the marine environment (Articles 192-196) and living resources on the high seas (Articles 116-120) have been strictly regulated. Convention establishes regulations for the exploitation of resources beyond national jurisdiction in the deep seabed, with the goal of ensuring environmental protection and preventing harm to the marine environment[217]. In addition, there is the International Seabed Authority (ISA) which is established under UNCLOS, empowered to organize, monitor, and regulate the activities related to mineral resources in the international seabed area, an area beyond national jurisdiction with the purpose of preventing environmental harm from deep-sea mining activities[218].

Conventions of the International Maritime Organization (IMO) which is adopted in 1948 and came into force in 1958, establish worldwide benchmarks for the environmental impact, safety, and security of international shipping. These agreements facilitate the implementation of restrictions to prevent marine pollution, including oil spills and emissions, via conventions such as the International Convention for the Prevention of Pollution from Ships (MARPOL). Furthermore, they establish standards for the design, construction, and operation of vessels with the intention of ensuring their safety and averting maritime mishaps. IMO Conventions additionally promote international coordination and cooperation among member states with the aim of establishing a marine industry that is more sustainable, environmentally responsible, and efficient[219].

An additional convention that sets environmental standards for the oil and gas sector is the Convention on Biological Diversity (CBD) which has been ratified by 196 nations. The CBD encompasses the preservation and responsible utilisation of biological diversity, which includes marine biodiversity situated outside the territorial boundaries of nations. The Global Biodiversity Framework is still being negotiated as a legally binding instrument under the CBD to protect marine

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[216] CAITLIN, K.B. *United Nations Convention on the Law of the Sea (UNCLOS): Living Resources Provisions*. Oct.4, 2023, ISN R47744, Congressional Research Services. Online available at: < https://crsreports.congress.gov/product/pdf/R/R47744>

[217] The United Nations Convention on the Law of the Sea. Online available at: <https://www.un.org/depts/los/convention_agreements/texts/unclos/unclos_e.pdf>

[218] International Seabed Authority. Online available at: <https://enb.iisd.org/>

[219] Convention on the International Maritime Organization. Online available at: < https://www.imo.org/en/About/Conventions/Pages/Convention-on-the-International-Maritime-Organization.aspx>

biodiversity in these areas, which may include provisions for the deep sea[220].

These international conventions and agreements are critical for governments to collaborate in their efforts to preserve and conserve the deep-sea environment by regulating human activities to limit their effects and supporting the sustainable use of marine resources. In general, it is also important to understand what types of damages and potential incidents are to be regulated and protected by these documents. Figure 9 illustrates the environmental damages caused by each phase of offshore oil and gas operations. We can see that spillage of hazardous materials, oil leakage, explosions, fires, unplanned plant disruption, sounds occurring during drilling operations, and other damaging elements are the main framework of protection.

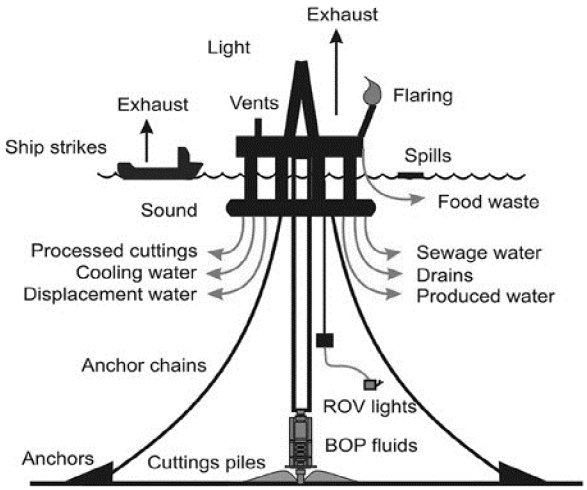

Figure 9. Environmental effects of oil and gas activities[221].

Prior to the commencement of deep-water gas and oil production, seismic surveys are conducted to identify potential carbohydrate reserves and investigate underlying geology. These surveys include increased light and sound emissions from vessels operating at sea. The amplitude of sound waves exhibits variability, whereas, in most cases soundwaves could be detected at almost 4000 kilometres from the survey vessel. Such soundwaves cause direct damages to marine mammals, impeding their feeding, breeding, resting, and migration, while also disrupting their communication channels and navigation routes. Besides occurred sounds, significant quantities of

[220] Convention on Biological Diversity, key international instrument for sustainable development. Online available at: <https://www.un.org/en/observances/biological-diversity-day/convention>

[221] CORDES. EE.; JONES, D.O.B.; SCHLACHER, T.A; et al. *Environmental Impacts of the Deep-Water Oil and Gas Industry: A Review to Guide Management Strategies*. (2016). Environ. Sci. 4:58, pp.7. Doi: 10.3389/fenvs.2016.00058

artificial light such as gas flares, electric lighting and other artificial lights occurring due to staff operations emitted by oil field operations alters upper ocean biological processes such migration of fishes and birds. Installation of infrastructure on the seafloor, including pipes and anchors, also leads to the dispose of drilling waste, which includes fluids, drill cuttings, excess cement, and generated water, as well as other toxic compounds that may have adverse environmental effects[222].

Despite the advancements and progress that have been made in oil and gas exploitation, exploration, and production operations in the modern age, the magnitude of the environmental damage and the occurrences that have occurred still necessitate significant actions and urgent measures to be taken in this area. Thus, despite the evident benefits and prosperity that the shift toward renewable energy sources would bring to both humanity and the environment, it is evident that this transition will not occur soon. Hence, several enhancements should be implemented in oil and gas contracts for the protection of the safe future of our planet, wildlife, and animals. As one of the primary research directions of this study, with a particular emphasis on PSAs, such amendments must be implemented to the national laws and oil and gas agreements.

In terms of legislative approach, the presence of special laws that are harmonized with the conventions and international standards, frequent monitoring of the area where operations are conducted, an increase in fines applied to oil companies due to ecological damages (leakage of hazardous liquids, violation of safety requirements, etc.) and the implementation of educational activities to local state institutions and state bodies specialized in environmental protection and safety can result in a noticeable development in this field. Furthermore, the adoption of environmentally sustainable technologies for operational activities in this field, the enhancement and optimization of oil disposal techniques, the mitigation of methane emissions during production, and the implementation of water recycling and reuse practices can contribute to the establishment of a more environmentally friendly approach in this area. The establishment of research and monitoring institutes, along with the intensive examination of Environmental Impact Statements and Assessments, can also make valuable contributions to this field[223].

PSAs can be enhanced to include additional measures that specifically emphasise the

[222] Ibid, pp.7-8.

[223] KADAFA, A.A. *Global Journal of Science Frontier Research Environment & Earth Sciences*. Volume 12, issue 3, Version 1.0, Year 2012. (USA) Online ISSN: 2249-4626 & Print ISSN: 0975-5896. Online available at: <http://large.stanford.edu/courses/2017/ph240/nwagbo1/docs/kadafa.pdf>

reduction of environmental harm in a more comprehensive manner. PSAs have the potential to encourage the use of advanced technologies and best practises in oil and gas extraction, thereby lowering the environmental impact of these activities. Contractual provisions have the possibility of incentivising the use of environmentally sustainable drilling methods, the implementation of emissions-reduction technologies, and the establishment of efficient waste disposal systems. PSAs may include financial guarantees or mechanisms requiring companies to allocate funds specifically to implement environmental protection measures. Furthermore, governments can incorporate incentives or bonuses into the structure of PSAs to recognise and reward companies that demonstrate exceptional environmental performance. This has the potential to encourage the adoption of environmentally sustainable practices that go beyond the boundaries set by legislation. Furthermore, the inclusion of convention requirements as minimum standards and their explicit reference in contracts, in addition to compliance with national environmental laws, would increase IOC accountability.

During the course of this research, we analysed the significance of oil and gas contracts in the context of establishing and enhancing energy security, along with the global shifts required to maintain its stability. Furthermore, this study aims to examine the developing dynamics of the legal framework governing the oil and gas industry in both the EU and Azerbaijan. In light of the aforementioned context, it is worth noting that significant measures have been implemented to facilitate the shift from hydrocarbon reserves to renewable sources of energy.

It is crucial to ask, though, if developed countries' renewable energy projects and the harmonisation of their national laws governing this area are enough to effectively advance this policy. When it comes to transitioning to renewable resources, what are the primary horizons, objectives, and opportunities for developing countries, which account for most gas emissions?

IV.II. HARMONISATION OF NATIONAL LAWS GOVERNING THE USE OF RENEWABLE ENERGY SOURCES

Summary

The subchapter IV.II examines legal methods of partially or fully harmonising national laws, with a special emphasis on harmonisation among member states as detailed in Article 288 of the TFEU. The section outlines five levels of harmonisation and highlights key obstacles that come with this process. Featuring a case study on Azerbaijan provides a practical view, demonstrating the legislative challenges and factors involved in achieving harmonisation, and highlighting the complexities of aligning national laws with European standards.

In the first chapter, we have discussed the enhancement of EU legislation in the field of oil and gas, as well as treaties and directives adopted in the field of renewable energy resources, as well as methods of partial or full harmonisation of national legislation. However, sometimes the process of harmonisation has been more difficult than anticipated in policies and strategies, and in many cases, it has been slowed by hard legislative barriers. This study examines Azerbaijan to determine the nation's level of readiness for the transition to renewable energy sources and the harmonisation of domestic laws. Research has demonstrated that the advancement of renewable energy technologies and the extraction of substantial energy deposits from these resources are significantly impacted by a nation's geographical location. The greater a nation's diversification of natural resources, the higher the anticipated reliance on renewable energy sources. Azerbaijan is another nation that possesses considerable strong potential for the implementation and advancement of renewable energy resources. A captivating aspect of the country is its mountains, streams, and rivers, in addition to the well-known Baku winds.

- *What are the key principles and methods of harmonization within legal contexts?*
- *How does the process of harmonization of national law aim to eliminate divergent elements and overcome differences among various legal orders to ensure their coherence and alignment with the objectives and interests of the entities involved?*

Beginning with a foundational knowledge of harmonization will provide essential information for subsequent analyses. Harmonization is an equivalent procedure to enhancing legal

and regulatory frameworks and modifying national legislation in a particular domain, intending to establish uniform and consistent laws throughout various regions. This procedure entails the technical and judicial preparation, approval, and verification of legal acts as a part of national law. Nevertheless, the process of establishing unified goals and legal regulations within diverse national legislations is a challenging one. To facilitate and manage this harmonization, the EU employs a variety of strategies for the harmonization of Member States, including third countries that participate in the pursuit of common objectives. Harmonisation derives most of its objectives and guidance from the EU's legal acts. They establish consistent regulations and benchmarks for all member states and mandate that national legislation correspond to the standards. Furthermore, the EU's instruments for achieving harmonization among member states are outlined in Article 288 of the TFEU[224]. It facilitates the harmonization of national legislation by serving as the legal basis for the implementation of EU laws and regulations. This article details three acts that have been necessary for national transitions.

(a) Regulations – with the force of law extending to every EU member state. Without further implementation, the uniform rules, and obligations they establish are automatically integrated into national legislations.
(b) Directives- they are obligatory for the directed member states (one, several, or all in case adopted at EU level) to incorporate them into their national legislation so that they can enter into force (unlikely Regulations which are directly applicable after its enforcement). They are primarily of general application, and each national authority has the option of selecting the form and methods to achieve the targets set by Directive.
(c) Decisions, recommendations, and opinion - they impose legal obligations on the recipient (member states, individuals, or entities). They must ensure that the specific measures outlined in such decisions (or opinions) are carried out in line with the decision to comply with EU standards while implementing harmonization.

According to the Article, the aforementioned statutes constitute EU secondary law. On the other hand, the founding treaties (TFEU, TEU, etc.) have also direct force as EU primary law (so-

[224] Article 288 of TFEU.

called direct effect doctrine). All the EU member states are obligated to comply with the established general principles[225].

Harmonisation may also be implemented according to the ECJ case law. Primarily, this mechanism is implemented so that national judicial systems adopt a fair approach and judgements at the EU level. The principal goal is to address and uniform inconsistencies that may impede cross-border collaborative endeavours. However, achieving complete harmonization can be difficult because of differences in the political, social, and cultural settings of each nation. Theoretically, there are five levels of harmonisation:

(a) Full harmonization: All member states are required to comply to the same design and strategy that is set at the EU level. There is no room for member states to impose stricter regulations on a national level, so they must comply with these EU standards. The specified target cannot be broken down into individual member states, but all member states are obligated to meet it;
(b) Medium harmonization: Like full harmonisation, a single design and legal instrument is applied uniformly to all member states. A standardised support mechanism operates evenly across all Member States, but national authorities have the freedom to implement various methods aligned with their industrial or policy objectives in their national legislation. This level of harmonisation allows the EU to build shared minimum criteria while allowing member states to maintain or implement stricter regulations that comply with EU laws;
(c) Soft harmonization: This involves guidelines, recommendations, decisions which are mainly have non-binding characteristics, in order to encourage member states in application of their national strategies in order to achieve specific target broke down to the member states individually;
(d) Minimum harmonization: This establishes a foundation of minimum targets or objectives at the EU level, which is then broken down by member states. At the same time, member states can impose stricter measures based on national interests. This ensures that

[225] CAPETA, T. *Report on "Harmonisation of national legislation with the acquis communautaire".* Venice Comission, CDL-UDT(2010)017 , T-06-2010, Strasbourg.

member states can develop their mechanisms as long as they meet the EU's minimum requirements;

(e) No harmonization: This, like minimum harmonisation, creates a foundation of minimum targets or objectives at the EU level, which are then broken down by member states. However, no minimum requirements are specified, and national authorities are entirely free to design their own harmonisation mechanisms. Like minimum harmonisation, creates a foundation of minimum targets or objectives at the EU level, which are then broken down by member states. However, no minimum requirements are specified, and national authorities are entirely free to design their own harmonisation mechanisms[226].

Diversity in levels of harmonization assists the EU in achieving a balance between the necessity for a unified regulatory framework and the recognition of the unique national interests and circumstances of its member states. As mentioned earlier, the degree of harmonization selected often depends on the policy domain and the desired proportion between uniformity and national autonomy within the EU.

In Azerbaijan, the most common incentive mechanisms are financial incentives and state financing. The main incentive tools in this case are public investments, grants, subsidies, or discounts. The country exhibits a technological capacity of 135 GW for onshore and 157 GW for offshore renewable energy sources. The economic viability of these sources is estimated to be 27 GW, comprised of 380 MW of bioenergy potential, 520 MW derived from mountain rivers, and 3,000 MW of wind energy. As a major energy producer on an international oil and gas industry, Azerbaijan is increasingly prioritising the adoption and integration of renewable energy sources to ensure its energy security[227]. The Strategic Roadmap on National Economic Perspectives, which establishes specific goals for the advancement of the non-oil industry, was ratified by the Presidential Decree on December 6, 2016. One of the aims is to enhance the proportion of foreign direct investment

[226] STEINHILBER, S. *Exploring Options for the Harmonisation of Renewable Energy Support Policies in the EU using Multi-Criteria Decision Analysis.* Raunhofer-Institut Für System- und Innovationsforschung Isi. 2015, pp. 24-25. Online available at: < https://publica-rest.fraunhofer.de/server/api/core/bitstreams/b6e44602-bb5b-4844-8dad-ab3e32d46cab/content>

[227] The Ministry of Energy of the Republic of Azerbaijan. *The Use of Renewable Energy Resources in Azerbaijan* (hereinafter referred as Renewable Energy resources in Azerbaijan). Online available at: < https://minenergy.gov.az/en/alternativ-ve-berpa-olunan-enerji/azerbaycanda-berpa-olunan-enerji-menbelerinden-istifade>

(FDI) in sectors other than hydrocarbons, with the target of increasing it from 1.5% to 4% by the year 2025. The sectors in which concessions are applicable have been identified, and investments in alternative energy are currently eligible for concessions. This document serves as confirmation that investors have been granted tax and customs benefits. The total value and scope of projects required to justify investments in alternative energy are specified. Projects that satisfy these defined criterias are eligible to obtain applicable tax and customs advantages. In addition, the roadmap aims to increase the percentage of non-oil sector exports from $200 per capita in 2016 to $450 by 2025, and $1,200 by 2035[228]. The government has shifted its primary focus towards renewable resources, specifically those outside the oil sector. In accordance with the Paris Agreement, which was established on 12 December 2015 as a means of implementing global climate change initiatives, the government has set a goal of achieving a 35% reduction in greenhouse gas emissions through its Nationally Determined Contribution (NDC). Furthermore, during the COP 26 conference in 2021, it was further determined that the target reduction should be increased to 40% by the year 2050.

The legal framework of the Republic of Azerbaijan on renewable energy resources includes several laws and international conventions ratified by the government. Law on Energy Resources Utilisation dated 30 May 1996 regulates the economic, legal, and social aspects of energy resource utilisation, as well as establishing the fundamental principles of the relationship between the government and legal entities operating in the energy sector. In addition, another law which is important in legal framework of energy resources is the Law on Power Industry which is adopted in 3 April 1998. Given the technological advancements and transformations that have occurred in Azerbaijan and the global energy industry over the past decades, the commencement of the transition to renewable energy sources, the accumulation of experience in this domain, and the Furthermore, additional significant legislation within the energy resources legal framework is the Law on Electricity Power, enacted on April 3, 1998. However, it became imperative to enact a new legislation through updating previous ones in this sector that aligns with international standards efforts and to advance cooperation with the EU. Considering the aforementioned facts, recent Law on Electricity Power Law of the Republic of Azerbaijan was subsequently ratified on October 2,

[228] Strategic Roadmap for National Economy Perspective of the Republic of Azerbaijan. Online available at: <https://monitoring.az/assets/upload/files/15075d6928310402cd152c96db0d6835.pdf>

2023[229]. Furthermore, on May 29, 2019, the presidential decree of Azerbaijan was approved with the purpose of facilitating the execution of the proposed legislation named "On expediting reforms in the energy sector of the Republic of Azerbaijan."

The adopted law "On the use of renewable energy sources in the production of electricity" on May 31, 2021, ensures the advancement of the transformation to renewable energy and promotes its development. The legislation establishes the legal, economic, and organisational foundations for the utilisation of renewable energy sources in electricity generation. Additionally, it specifies the support mechanisms that facilitate the advancement of electricity production from renewable sources and regulates the correlations within this field[230].

The Ministry of Energy is the responsible authority for the legal, economic, and administrative regulation of energy issues. The government authority ensures the successful implementation of state policies, the preparation of laws and state policies in this area. The State Agency on Alternative and Renewable Energy Sources (SAARES), established on July 16, 2009, is also responsible for driving the development of the country's renewable energy resources and related projects. The establishment of this organization demonstrates the importance of this field to the country.

Azerbaijan's special interest in the production and promotion of renewable energy resources is manifested in the implemented projects. Given Azerbaijan's goal of increasing the share of renewable energy sources in electricity production capacity to 30% by 2030, the country is collaborating in this area with various energy companies from around the world. For example, on January 17, 2023, for the construction of for the 230 MW Garadagh Solar Project, the Investment Agreement, Power Purchase Agreement and Transmission Network Connection Agreement has been signed between the Ministry of Energy and Azerenergy OJSC and Masdar which is the United Arab Emirates energy company. The Project intends to build a 1 gigatonne onshore wind energy project in Azerbaijan by 2026 (which means enough to power more than 110,000 homes, reducing carbon emissions by over 200,000 tonnes a year), a 2 gigatonne offshore wind energy and green

[229] Official website of the Milli Majlis (Parliament) of the Republic of Azerbaijan. (AZ). Online available at: <https://meclis.gov.az/news-layihe.php?id=2144&lang=az&par=0>

[230] *Renewable Energy resources in Azerbaijan.* Official website of the Ministry of Energy of the Republic of Azerbaijan. Online available at: < https://minenergy.gov.az/en/>

hydrogen project by 2033, and onshore solar energy and wind power by 2037, as well as to expand the use of offshore wind resources. The Abu Dhabi Fund for Development, the Asian Development Bank, the European Bank for Reconstruction and Development, and the Japan International Cooperation Agency have all contributed to the project's funding[231]. In general, it is important to highlight the EBRD's support to the countries, including Azerbaijan, in the technological, economic, and other domains throughout the renewable energy market's development and the harmonizing efforts of this sector with the EU standards. To date, the Bank has invested over €3.6 billion in 181 projects in the country. The Bank's strategy in Azerbaijan is to assist the country in diversifying its economy and developing its non-oil private sector[232]. It is also worth noting that Azerbaijan has successfully executed a number of other renewable energy projects:

Project name	Value
Lokbatan Wind Power Station	74.4 mln. Manat
Khizi-3 Wind Power Station	377.7 mln. Manat
Khizı-2 HEPP	193 mln. Manat
Absheron Hybrid Station	154.4 mln. Manat
Hybrid electric and thermal station	96.3 mln. USD
Samukh Agroenergy Residential Complex	165 mln. USD
Wind Island	1 408.9 mln. USD
PV Siyazan Solar Station	60 mln. USD
Pirallahi Wind Station	800 mln. USD
Samux-Agroenergy Project	150 mln. USD

Figure 10. Renewable energy projects in Azerbaijan[233].

The country is not only devoting its attention to the implementation of projects within the capital city of Baku but also at the level of the entire republic. Thus, the approval new Renewable energy law, as well as the transformation of the Karabakh region of the Republic of Azerbaijan, (which is liberated from Armenian occupancy) into a green energy zone, will provide support for the development of this field. This region's high renewable energy potential makes it possible to transform it into a green energy zone by utilizing local water resources and constructing appropriate

[231] Press realise: *Masdar signs 1GW Clean Energy Agreement in Azerbaijan following Presidential Inauguration of Garadagh Solar Park, Largest in the Region.* Online available at: < https://masdar.ae/en/news/newsroom/masdar-signs-1gw-clean-energy-agreement-in-azerbaijan>

[232] BİTSADZE, R. *EBRD invests US$ 21.4 million in pioneering solar plant in Azerbaijan.* Official website of EBRD. Online available at: < https://www.ebrd.com/news/2022/ebrd-invests-us-214-million-in-pioneering-solar-plant-in-azerbaijan.html>

[233] FARMANLI, J. *Regulatory role of the state in the field of use of alternative energy resources*. Baku, 2019.

infrastructure for the widespread use of solar and wind energy technologies. Although our country has significant oil and gas reserves, it is well known that traditional energy resources are not infinite. Harmonisation in renewable energy is important not only for Azerbaijan but also for the oil and gas needs of the EU to guarantee the region's energy security through Azerbaijani resources.

However, there are several steps that must be taken to improve the development and legal framework of this area:

- The PSA contract for the development of the Azeri-Chirag-Gunashli fields, commonly referred to as the Contract of the Century, established a standard for subsequent agreements, as previously mentioned. Within the domain of renewable energy resources, this point requires further development. The establishment of an internationally recognized structure and standard form of PPAs in this domain can be influential in facilitating the implementation and legal governance of projects, while also mitigating the potential of future disputes.
- Even though there are primary and secondary laws which is regulating renewable energy sources and their operations, there is no profound regulatory law which cover all the key aspects this field. The main provision is stipulated in primary laws dedicated to the renewables which are shown above, whereas secondary laws regulated issues such as related to the tax, investment, commercial sides. There is a need for enhancements to the regulatory and legal framework that underpins this sector. Additional improvements ought to be made to the legislative framework so that it can more effectively support the endeavours undertaken in this domain.
- The establishment of a domestic renewable energy market in Azerbaijan could be significantly simplified by a specialised law that would give comprehensive guidelines for the renewable energy industry. Market players in the renewable energy sector would benefit significantly from such regulation since it would provide a clear and trustworthy long-term perspective.
- At present, renewable energy providers must obtain permits for the construction of their power plants, the procurement of energy, and the utilization of land where their projects will be implemented in order to proceed with their projects. The process of acquiring these licenses, granting project approvals, and resolving other administrative matters should be

designed to provide investors with the most convenient and easily accessible conditions. There is a need to develop online instructions for obtaining this type of license, as well as the option to submit applications online.

- As previously stated, renewable energy projects are exclusively financed through foreign banks. Azerbaijan's banking system perceives the inadequate liquidity associated with such projects which is an unattractive investment climate for investors. Moreover, local financial institutions lack the confidence and motivation to provide financial assistance to this industry. In order to encourage investment, the government might subsequently consider the establishment of a risk mitigation facility providing guarantees for such projects that meet the necessary requirements. In addition, such facilities can also work in partnership with local banks to support their development of renewable energy project financing expertise and capabilities.
- Because Azerbaijan is an oil-rich country, there have been internationally recognized oil engineers until our time. Currently, this field is maintaining its relevance and training qualified personnel. However, the development of renewable energy plants and the growth of this field necessitate more technical knowledge and a significant increase in the number of field specialists. The local workforce should be sent abroad for training, cooperation with leading educational countries should be expanded, and renewable energy departments should be established in universities.

CONCLUSIONS

A further contribution to energy security

As a brief conclusion, to fully comprehend the insights of the study, I would like to summarise the findings of the research in the context of the given research questions:

1. *What are the existing renewable energy laws, policies, and regulatory frameworks in Azerbaijan and the EU, and how do they contribute to energy security? (see Chapter I.I and II.I)*

The research demonstrated that the primary approach to enhancing energy security is not solely based on regulatory and legislative initiatives, but also on strengthening the geopolitical position and establishing partnerships with the energy-supplying countries. The analyses also facilitate a thorough comprehension of the genuine context of energy law and energy security, rather than restricting the perspective to its legislative formulation or political developments, and instead finds an optimal equilibrium.

Despite the gradual development of regulatory mechanisms through various legal instruments for oil and gas products, significant advancements began as a result of the oil crises. Establishing the European Coal and Steel Community, signing the Euroatom Treaty, adopting the Rio Declaration, the Kyoto Protocol, the Paris Agreement, and other binding hard law instruments were the principal pillars behind all legislative measures. Particularly, after the Paris Agreement, the EU's energy policy shifted its attention towards decarbonising the energy sector, implementing renewable energy sources, enhancing energy efficiency, and establishing ambitious targets for reducing emissions. Throughout the research, we have accessed a wide variety of legislative bases from the EU and Azerbaijan that pertain to energy law, renewable energy, their regulatory mechanisms, and the establishment of partnerships. Additionally, we examined the relationship between this field and other legal disciplines, including environmental law, corporate law, public law, and contract law. The EU and Azerbaijan have made major achievements in the establishment of collaborations and cooperation for their utilization of fossil fuel resources, as demonstrated by their historical background and development dynamics. Focus is also given to the understanding of the liberalisation of the energy sector and single market, the EU's energy policy objectives, which are outlined in Article 194(1) of the TFEU, the impacts of oil shocks on the global energy security, energy independence from Russia, execution of the Fifth Energy Package, etc. Analyses of the legal

database on this domain demonstrate that the adoption and establishment process of the regulatory and legislative framework of the energy law in the EU and Azerbaijan is directly linked to enhancing the energy security of the respective region. The discussion must be understood not solely through a view of technical lawmaking processes or framework establishment, but on a broader conceptual level. The establishment of a such framework which is diligently aligned with adopted standards enhances the state's energy jurisdiction, as well as promotes opportunities for investor attractiveness. As a result, laws, regulations, policies and other legislative acts stimulate sustainable practices and promote technological innovation that supports economic growth.

2. *What role does EU law play in promoting legal harmonisation and alignment between the energy legislation of the EU and Azerbaijan, specifically in relation to renewable energy objectives? (Chapter I.II)*

According to the facts provided in the study, it can be confidently stated that the EU and Azerbaijan have developed a solid partnership not only in the energy sector, but also in economic, social, cultural, and technological advancement. The existence of substantial regional connections, as formally acknowledged in the contractual arrangements between the parties, has demonstrated that Azerbaijan plays a significant role in strengthening energy security as a supplying country. In the opposite direction, the EU supports Azerbaijan in advancing its legislative and regulatory system and increasing its minimum standards to the EU level. Furthermore, the parties have demonstrated indisputable progress in achieving progressive harmonization with the EU, particularly in terms of the development of renewable energy resources. Azerbaijan's regulatory and legislative framework has achieved the primary position as a carboghydrogen rich country. Nevertheless, these advances mostly concentrate on the regulatory aspects of carboghydrogen (oil and gas) resources, which are the country’s primary economic driving force. Considering the common goals of Azerbaijan and the EU, which encompass not only traditional energy resources but also renewable energy infrastructure and resources, it is rational that we anticipate significant legislative measures in this domain. Since the early 2000s, the country has implemented the necessary groundwork for the future advancement of renewable energy resources. Nevertheless, starting from the early 2020s, this process has accelerated profoundly. This serves as a clear indication of the critical importance of renewable energy sources for the government. Therefore, Azerbaijan, as the host country of COP29 (2024), is making significant efforts to align its national legislation with

the EU standards to attract international investments in sustainable energy sources. As already mentioned in previous chapters, in May 2021, “the Law of the Republic of Azerbaijan on the use of energy resources in electricity generation”[234] was enacted, reflecting the initial fundamental legislative measure towards the development of a united renewable energy legal framework. Secondary legislation instruments have been also constructed based on the development of new laws. These instruments include administrative and regulatory mechanisms for investments, such as rules on the application of net metering and calculation schemes, licensing specifications, templates for power purchase and connection agreements. The law established two methods of selecting investors for electricity generation projects: auctions and direct negotiations. To create a favorable environment for the growth of the renewable energy sector, as well as improving overall economic conditions and enhancing relations with other countries through investment, a Decree “on the Improvement of the investment promotion” was enacted in December 2022. The obtaining of an investment promotion certificate offers legal entities exemption from property and land tax, VAT, and customs duties on imports of machinery, technological equipment, and installations. In addition, they are entitled to a 50% reduction in income tax (for individual entrepreneurs) or profit tax (for legal persons) for 7 years. Such enhancement of the national legislation, revision of the current framework, as well as continuing implementation of legal reforms, will result higher level of legal certainty for a sustainable future. Promoting a business environment that is attractive to investors and ensuring the protection of potential investments also plays an essential role in the economic development of the country.

The discussed legislative initiatives, tax incentives, reforms to national legislation, and potential cooperation horizons demonstrate that both parties have made undeniable efforts for a successful partnership. As a developing country, Azerbaijan has a substantial part in ensuring Europe's energy security, particularly during the escalation of modern political dynamics. However, Europe is also keen on strengthening existing relationships and investing in Azerbaijan, given its immense potential. There has always been a strong emphasis on the EU's role in enhancing national legislation, developing the expertise of governmental bodies, and increasing the number of local professionals in the agreements. As stated in previous chapters, among other collaborative

[234] Law of the Republic of Azerbaijan “On use of renewable energy sources in the generation of the electricity” dated May 31, 2021.

agreements between the parties in various domains of energy resources, the Memorandum of Understanding on the Strategic Energy Partnership (2006), encompassed legislative reforms to support Azerbaijan as one of the Agreement's main objectives. Providing administrative and legislative guidance not only to Azerbaijan but also to the region has an invaluable impact on strengthening the legal framework for future investments and collaboration. In terms of renewable energy cooperation, a Memorandum of Understanding on Strategic Partnership, signed in 2022, as well as a Memorandum of Understanding on Wind Energy Cooperation between the Azerbaijan Renewable Energy Agency and the European industry association WindEurope, have elevated renewables to the highest priority within the scope of the collaboration. All of these agreements entailed the

EU's best efforts to facilitate legislative harmonization, ensuring compliance with national standards with the EU trash hold, as well as Azerbaijan's determination to carry out bilateral cooperation to the best of its ability. During the signing of the Memorandum of Understanding on wind energy cooperation, it is noteworthy to mention the comment made by Kadri Simson, Commissioner of EU-Azerbaijan Green Energy Advisory Council for Energy: *"The EU and Azerbaijan's strategic energy cooperation has shown all its flexibility and dynamism. In 2019, there was only gas on the horizon. Not today. … Southern Gas Corridor has evolved to become a forum for cooperation also on renewables and electrification. This is an extraordinary result and is proof of how this project is forward looking and open to the future. We have made clean energy a key part of EU-Azerbaijan bilateral relations. … We have made clean energy a key part of EU-Azerbaijan bilateral relations…*[235]*"*. Comment has demonstrated a clear direction, growing from fossil fuels to renewable energy sources, all the while strengthening ties between the parties.

3. *What are the key challenges and barriers to the implementation of the EU's renewable energy projects? (Chapter I.III)*

While the thesis provides specific solutions to the raised matter, it is worth summarising the main challenges to developing legal and regulatory frameworks for renewable resources. Firstly,

[235] *EU steps up renewable energy cooperation with Azerbaijan*. Official website of European Commission, date 04.03.2024. Online available at: < https://neighbourhood-enlargement.ec.europa.eu/news/eu-steps-renewable-energy-cooperation-azerbaijan-2024-03-04_en>

fossil fuel resources continue to dominate the energy landscape whereas renewable energy infrastructure experiences its gradual development. Despite significant progress in sustainable energy infrastructure, it cannot primarily contribute to and maintain energy security like fossil fuel resources. Another factor is that major investment contracts with leading energy companies have been linked to long-term oil and gas projects. In addition, the renewable energy industry requires more time to establish a comprehensive and profound legislative framework and infrastructure. Such progress will reduce market legal uncertainty and increase the attractiveness of significant investments. In the context of Azerbaijan, even though there is immense growth in this domain, there are remaining administrative challenges, as well as legislative and regulatory complexities. Being an oil-producing country, overcoming these challenges necessitates a customised strategic and political approach while maintaining the country's economic prosperity, which entails future development and harmonization targets. In addition, the need for further high-tech technologies and investments can be the main support for effective growth.

4. *Do the contractual provisions within a Production Sharing Agreement (PSA) in the oil and gas industry ensure legal stability for long-term projects, and how do they align with the EU laws? (Chapter III.III)*

Due to the international and transboundary characteristics of oil pipelines, their regulatory governance is formulated by fundamental principles of international law. This governance is established through intergovernmental agreements concerning transportation, transit, investment, environmental protection, and other related matters. Due to the geographical uneven distribution of natural gas and oil supplies, well-structured international cooperation is essential for maintaining stability in the global energy market. Various contractual models are mainly applied for the extraction, development, and other related activities of oil and gas resources. Prior to analysing the conceptual components of the PSA agreement, which serves as the primary legal framework for the oil projects discussed in this research, various contractual models in the oil and gas sector are also examined. The legal features of the PSA agreement and its adoption as primary law have been thoroughly examined in the preceding paragraphs. Stabilisation clauses, fixed fiscal terms, dispute resolution mechanisms, and other fundamental provisions of PSAs mitigate risks from legal and regulatory changes while maintaining stability.

5. *How determination of the legal status of the Caspian Sea impact the implementation of the EU energy security strategies and policies related to its cooperation with Southern Caucasian Republics? (Chapter II.I and II.IV)*

As previously stated, the status of Caspian Sea is still undetermined. When the Convention on the Status of the Caspian Sea was adopted on August 12th, 2018, only the status and limits of territorial waters and fishing zones were determined for the nations. The current state of delamination of the Caspian baseline has not changed. As a result, the sectoral distribution of the sea is determined by bilateral agreements between Azerbaijan and Russia, Azerbaijan and Kazakhstan, and Kazakhstan and Russia. Even though those agreements provide solid resolution for avoiding disputes over the ownership status of natural resources, they have greater implications on cooperation with the EU. As defining the legal status of the sea has the potential to boost future cooperation between the Southern Caucasus Republics, particularly in terms of energy export routes.

6. *Which regulatory framework and contractual model could be facilitated to ensure further collaboration between the EU and Azerbaijan, particularly in the exploration and utilisation of renewable energy sources? (Chapter III.II and III.III)*

Our research investigated PSA as the principal tool for oil and gas projects, particularly in the Caucasus region. A similar trend becomes apparent in the advancement of the legal framework regulating projects performed in the renewable energy sector. In light of the lack of exploitation and related activities in this sector, PPA is the predominant contracting model in the industry. The contractual agreements between the operator and the state may alter the legal framework of the projects based on the volume of energy generated and the extent of energy to be produced; thus, this type of agreement lacks consistent regulations and guidelines. Research demonstrated that there are three additional primary types of physical PPAs, which are briefly examined.

7. What legal measures and challenges are involved in the harmonisation of Azerbaijan's legislation with the objectives and requirements of the European Green Deal package? (Chapter III.I and IV.I, IV.II)

We have summarised several challenges that need to be focused on in the near future in order to make the harmonisation process as effective as possible. These challenges include the lack of a uniform contractual approach for renewable energy projects, which creates legal and operational uncertainties for investors and stakeholders; heavy reliance on oil and gas as energy supplier countries; insufficient financial means for effective decarbonisation and harmonisation processes, as well as for modernisation of the infrastructure; and moreover. In addition, limited technical expertise and national expertise, as well as the immediate need for greater public awareness and stakeholder engagement, also hinder progress. Overcoming these challenges requires coordinated efforts, which include policy reform, international support, and the mobilisation of both public and private resources to achieve long-term sustainability goals. On the other hand, we have also stressed the state's efforts in the context of adopted legislation for a sustainable legislative framework, established financial incentives, and, more importantly, hosted COP29 in Baku in 2024, which is to be evaluated as detrimental growth towards global decarbonisation targets. Given efforts also will support the state's commitment to attract international partnerships, which would lead to the acceleration of environmentally focused reforms.

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