MERAL BALCI-ABDULLA KHANAYEV

BLACK GOLD OF BAKU

The HISTORY and FUTURE of AZERBAIJAN'S OIL

Black Gold of Baku: The History and Future of Azerbaijan's Oil Strategy is not merely a historical narrative; it is a reflection on the enduring legacy of oil in shaping Azerbaijan's past, present, and prospective future. This book offers a comprehensive examination of the historical, political, and economic forces that transformed Baku into a pivotal node in the global oil economy. Grounded in fieldwork, archival investigation, and policy analysis, it explores the roles played by indigenous entrepreneurs, foreign capital, Soviet-era centralization, and post-independence energy reforms. As the world confronts shifting energy paradigms, this work assesses Azerbaijan's strategic positioning and the continued significance of its hydrocarbon resources. It is an essential resource for scholars, policymakers, and readers interested in energy, history, and regional transformation.



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MERAL BALCI - ABDULLA KHANAYEV BLACK GOLD OF BAKU THE HISTORY AND FUTURE OF AZERBAIJAN'S OIL STRATEGY

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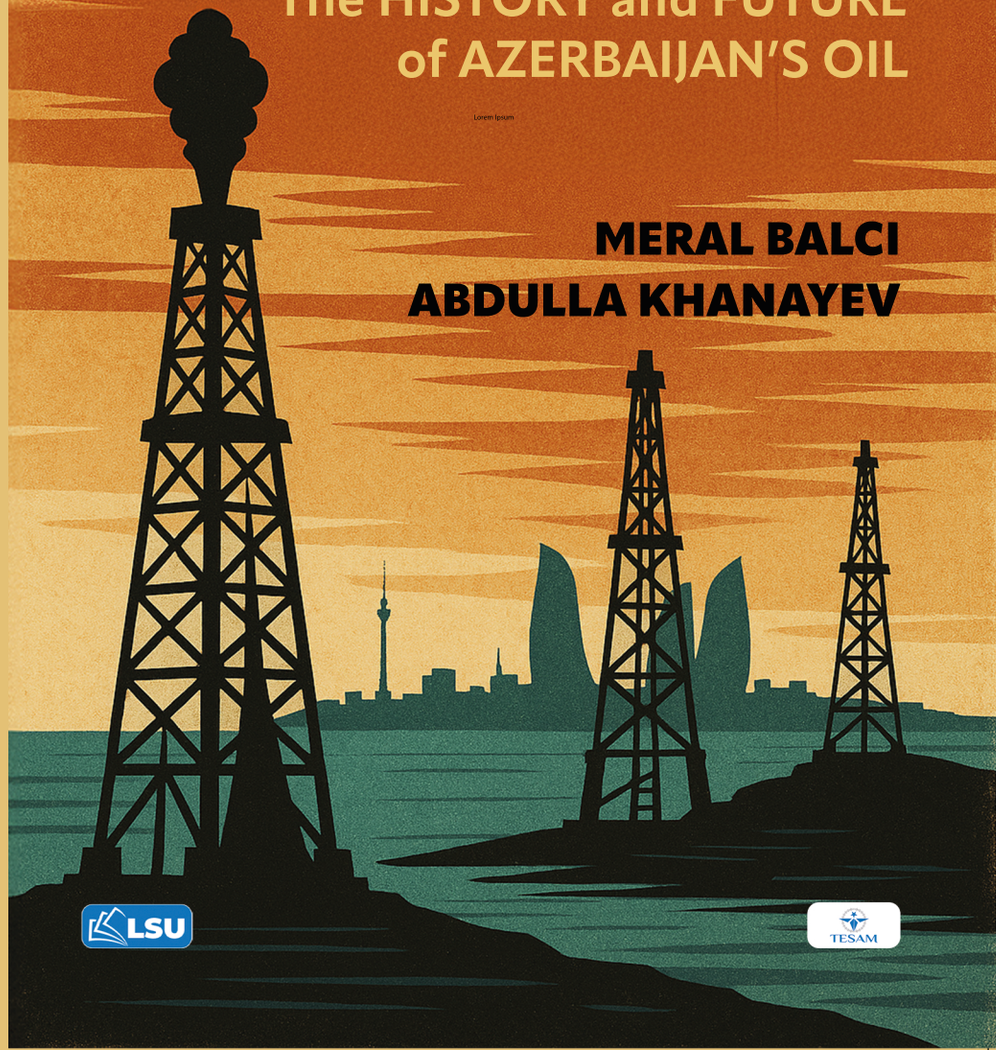

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Meral Balcı - Abdulla Khanayev

First Edition

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Meral Balcı
Abdulla Khanayev

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PREFACE

The decision to embark on the journey of writing BAKU'S BLACK GOLD: THE HISTORY and FUTURE of AZERBAIJAN'S OIL STRATEGY was made during the research for another project in Baku eight months ago. Witnessing firsthand the immense wealth derived from Azerbaijan's oil reserves and observing how this "black gold" is intricately woven into the fabric of the nation's development sparked an intellectual curiosity that could not be ignored. This book is therefore the result of meticulous fieldwork, archival research and source analysis that aims to provide a detailed examination of Azerbaijan's oil narrative, from its historical origins to its projected future.

During these eight months, our understanding of Baku's symbiotic relationship with oil deepened. We visited historic sites, from ancient oil wells in Balakhani to the first industrial oil well in Bibihaybat, from the Black City, formerly known as the oil haven and now known as the White City, to the new Baku City, from

the historic Ateshgah in Suraxani to the modern buildings that symbolize Azerbaijan's energy-driven economic growth.These explorations provided invaluable context, bridging the gap between past and present, and underscoring the transformative impact of oil on Baku's urban, cultural, and geopolitical landscape.

The intellectual journey of this book began in Istanbul and continued in Baku, where the narrative took shape and found its completion. The research process was enriched by the invaluable resources housed in the archives and libraries of Marmara University and Istanbul University in Turkey, and ADA University in Azerbaijan. These institutions provided access to rare documents, historical accounts, and contemporary analyses that have been instrumental in shaping the comprehensive perspective presented in this book.

At its core, this book seeks to analyze Baku oil from a historical vantage point, tracing its evolution from ancient extraction methods to its pivotal role in the global energy market. The historical chapters delve into the early acquaintance of Azerbaijan with oil, the emergence of Baku as a vital oil hub, and the influence of both local entrepreneurs and foreign investors in shaping the industry.

The narrative progresses to explore the Soviet era, detailing how Azerbaijan's oil resources were harnessed to fuel the needs of the USSR, and how the post-Soviet independence era marked a dramatic shift in the nation's oil policies. The signing of the "Contract of the Century" in 1994 is highlighted as a turning point that redefined Azerbaijan's role in the global energy landscape.

Beyond historical analysis, this book also projects into the future, contemplating the strategic significance

of Azerbaijani oil in world politics and its potential trajectory in the face of evolving global energy demands.

This work would not have been possible without the support and contributions of numerous individuals and institutions. We extend our deepest gratitude to Mr. Fariz İsmailzade, Vice-Rector of ADA University and and Professor Erhan Doğan from Marmara University.

BLACK GOLD of BAKU: HISTORY and FUTURE of AZERBAIJAN'S OIL STRATEGY is more than a historical account; it is a reflection on the enduring legacy of oil in shaping Azerbaijan's past, present, and future.

Baku, 2025

Meral Balcı
Abdulla Khanayev

INTRODUCTION

Oil, as one of the most critical energy resources shaping the economic and strategic dynamics of the modern world, has been at the center of international policies. Following the Industrial Revolution, oil became a cornerstone of industrialization while simultaneously reshaping global power balances. Regions rich in energy resources, in particular, have become focal points of both regional and global power struggles. Azerbaijan, with its abundant oil and natural gas reserves, has historically secured a unique position in these dynamics, establishing itself as an indispensable part of both regional and international energy policies. The oil of Baku, often referred to as "black gold" (or qara qızıl), holds not only economic significance but also critical geopolitical importance.

Azerbaijan's oil narrative gained prominence on the global stage in the late 19th century when Baku emerged as one of the world's most important oil production centers. During this period, international investors and companies engaged extensively in Baku's oil fields, con-

tributing significantly to the region's economy and infrastructure. The oil wealth of Baku attracted some of the world's largest energy companies and investors, fostering industrialization and paving the way for numerous advancements in the region. However, these resources also brought challenges, including intense competition, political interventions, and significant hardships for the local population. Issues such as the exploitation of local labor and environmental degradation underscored the unequal distribution of wealth generated by oil.

During the Soviet era, Azerbaijan's oil resources were integrated into the centrally planned economy and heavily utilized as part of the broader Soviet energy strategy. Baku became a strategic hub to meet the Soviet Union's energy needs, with the oil industry being entirely controlled by the state. Known as the "Soviet oil capital," Baku played a crucial role in the USSR's energy production, contributing significantly to its economic structure. During World War II, Baku's oil was a critical asset for the Soviet war effort, influencing the outcome of the war. However, the intense exploitation of oil during this period exacerbated environmental issues and deepened social inequalities.

The centralized control of the oil industry meant that the local population reaped limited benefits from this wealth. While technological developments in the region were supported, these advancements primarily served the broader interests of the Soviet Union. Moreover, the overexploitation of oil fields posed the risk of resource depletion. These factors necessitated a reorganization of Azerbaijan's energy policies following the dissolution of the Soviet Union and led the country to integrate this legacy into modern energy strategies.

The collapse of the Soviet Union in 1991 and Azerbaijan's subsequent independence marked the beginning of a new era in the country's energy policies. Independence provided Azerbaijan with the opportunity to control its energy resources and develop strategies for international cooperation. Azerbaijan took significant steps to utilize its energy resources effectively through foreign investments and to deliver them to international markets. A milestone in this process was the signing of the historic "Contract of the Century" in 1994, which became a turning point in the country's energy sector. This agreement enabled Azerbaijan to jointly operate its oil reserves with international companies, laying the groundwork for the country's emergence as a key player in the global energy market.

The effective management of energy resources has not only supported Azerbaijan's economic development but has also bolstered its infrastructure projects, social development initiatives, and national security. Additionally, it has strengthened Azerbaijan's political and economic presence on the international stage. The focus on energy diplomacy has allowed Azerbaijan to expand opportunities for regional and global cooperation. These developments illustrate the strategic significance of Azerbaijan's decision to adopt an energy-based development model in the post-independence period.

This book aims to examine Azerbaijan's energy policies from historical, economic, and political perspectives, highlighting the critical importance of oil for the country. By analyzing its historical foundations and the effects of regional and global energy strategies today, this study seeks to provide insights into the future trajectory of Azerbaijan's oil policies.

I

AZERBAIJAN'S ACQUAINTANCE WITH OIL

Azerbaijan's acquaintance with oil dates back much earlier than the modern era. Baku oil has been one of the main factors determining the economic and strategic importance of the region for centuries. These oil deposits, known since ancient times, have attracted the attention of various foreign travellers and explorers, especially since the Middle Ages. Historical records show that oil has been extracted and used in Baku since at least the 10th century. However, the earliest information about Baku oil in the Western world can be found in the accounts of the Venetian traveller Marco Polo in the late 13th century. Polo stated that in and around Baku there was 'an oil boiling from the ground' and that the people used this substance as fuel and especially utilised it for lighting. Italian explorer Marco Polo described the oil in his book while travelling through Asia by saying that oil had been used to burn and clean the mange of animals. He added that he had heard a oil spring around

Baku.[1] The information Polo conveyed in his travelogue enabled Europe to become acquainted with Baku oil and the natural riches in the region were brought to the attention of the Western world for the first time.

During the Middle Ages, observations on Baku oil were reported not only by European travellers but also by Arab and Persian geographers. In the 10th century, the famous Arab historian and geographer al-Masudi provided important information on the utilisation of oil resources in Baku.[2] According to his account, the crude oil obtained from the oil wells in Baku was used not only as fuel but also for some medical and industrial purposes.

However, preparing the oil for use was a very difficult process. In ancient times, simple methods were used for the distillation of oil. In the 1st century, the Roman physician Cassius Felix noted that white oil was obtained from black oil by boiling it. The Arab historian Muhammad ibn Najib Bekran al-Hamdani, who was in Absheron[3] in the 13th century, wrote that oil refining had existed here since the beginning of the 12th

1 Daniel Yergin, The Prize: The Epic Quest for Oil, Money and Power (New York: Simon & Shuster, 1991), 57.

2 Dilgam.Y. Ismailov. *History of Azerbaijan*, (Baku: AzMİU NPM, 2017), 96.

3 The Absheron Peninsula, located in Azerbaijan, is a significant geographical feature that hosts the nation's largest and most densely populated city, Baku, along with its neighboring urban centers, Sumgayit and Khırdalan. Stretching approximately 60 kilometers eastward into the Caspian Sea. The peninsula spans up to 30 kilometers at its widest point. It is considered the easternmost extension of the Caucasus Mountains. This landscape culminates in a prominent sand dune called Shah Dili, which has been designated as part of the Absheron National Park, preserving its unique natural environment.

century.[4] Other Arab and Persian sources, as well as Hamdulla M. Qazvini's work "Nuzhat al-Gulub", state that experiments on oil distillation were conducted in Absheron in the 13th century. At that time, the representative of the Russian embassy in Iran, Dr. I. Lerkhe, who was in the Baku oil region, described oil wells, how the process of extraction of oil was and transportation of oil extracted from the wells in detail in his memoirs.[5]

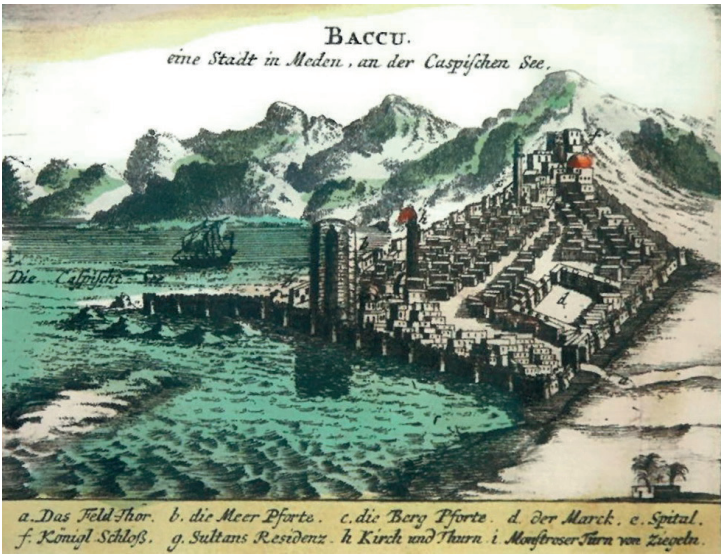
From an inscription on a stone found in one of the oil wells in Balakhani, it is understood that the well was dug in 35 meters depth and opened to operation by the master Allahyar Mamedali Nur Ogli in 1594.[6] According to the Iranian Emin Ahmed Razi, there were nearly 500 oil wells and wells around Baku at the beginning of the 16th century, and both "black" and "white" oil were extracted from them. In 1683, the German traveler, physician and naturalist Engelbert Kaempfer had been in the Balakhani, Binagadi and Surakhani fields on the Absheron Peninsula while working as the secretary of the Swedish embassy and told about the transportation of oil from the Absheron Peninsula to Iran, Central Asia and the North Caucasus.[7]

4 Miryusif Mirbabayev. *Concise History of Azerbaijani Oil*. (Baku: SOCAR Press, 2008), 12.

5 Ibid., 17.

6 The Ministry of Energy of the Republic of Azerbaijan. History of Development of Oil Industry. (2020). https://minenergy.gov.az/en/neft/neft-senayesinin-inkisaf-tarixi.

7 Idris Aliyev and Orkhan Mamed-zade, "History of the Baku "Black Gold": Fate of the Communities and Formation of National Bourgeoisie" in *The Baku Oil and Local Communities: A History*, ed Leila Alieva (Baku: Qanun, 2009), 42.



Kaempfer's description of Baku, 1683

During this period, natural oil seeps, especially in the Absheron Peninsula, attracted attention and were utilised by the people for various purposes. Mud volcanoes and natural oil seeps to the surface formed the foundations of Azerbaijan's 'Qara Qızıl'[8] heritage. During this period, oil was mostly used for lighting and heating purposes, but also found a place in religious ceremonies and traditional medical practices in Zoroastrianism, which led Azerbaijan to be known as

8 Qara Qızıl (Black Gold) is a term commonly used to refer to oil (petroleum) because of its high value and the critical role it plays in the global economy. The term emphasizes its significance as a resource that powers industries, transportation, and energy production, much like gold has historically been a symbol of wealth and economic power. The dark color of crude oil further complements the metaphor, symbolizing its "black" appearance and "gold-like" significance.

the 'Odlar Yurdu'[9,10].



Ateshgah (Fire Temple)- Zoroastrian Temple

The Surakhany region, known for its rich natural resources, has been an energy and trade centre for both

9 The geographical, historical and cultural features of the country are the basis of Azerbaijan's being called Odlar Yurdu (Land of Fires). The continuously burning fires resulting from natural gas leaks in this region have been the source of this title. The fact that ancient beliefs such as Zoroastrianism, which regard fire as sacred, sprouted in these lands and the presence of historical buildings such as Ateshgah also strengthen the historical foundations of this name. Moreover, the expression 'Odlar Yurdu' has become a symbol emphasising Azerbaijan's cultural and national identity. In this context, it is important to analyse Azerbaijan's relationship with fire in both natural and cultural dimensions.

10 Fərhad Ağazadə, "Bakı Neft Ticarəti və Onun Müxtəsərcə Tarixi I" in *Azərbaycan Qəzeti.* volume (3) (Baku: ADA University press, December 1918), 77-79.

the local population and the surrounding regions. The areas in Surakhany[11] known as "Ateshgah'[12] were considered sacred for Zoroastrianism and natural gas and oil spills around these temples played an important role in worship. Moreover, during this period, Azerbaijani oil was not limited to local use, but was transported to neighbouring regions and became a commercial commodity.

Over time, the potential of oil began to be realised in wider areas and this increased the economic and strategic importance of Azerbaijan. Merchants in the region transported oil in portable containers to different regions, which further strengthened Azerbaijan's strategic position on trade routes. Throughout the 15th and 16th centuries, oil became a part of everyday life, while at the same time it became a regional trade factor and played an important role in the trade between Asia and the Middle East via the Silk Road[13] These commercial activities contributed to the economic structure of Azerbaijan in the early period and partially increased the welfare of the people of the region.

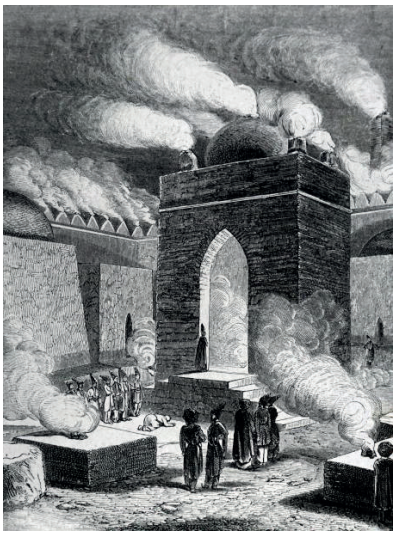
In the 17th and 18th centuries, Azerbaijan's oil re-

11 The name of "Surakhani" comes from the Sanskrit word "Surkashani" which means "a worshipping place". (Mirbabayev, *Concise History of Azerbaijani Oil*,13.).

12 Ateshgah (Fire Temple) is a Zoroastrian temple built in the 17th-18th centuries in the town of Surakhany near Baku, the capital of Azerbaijan. This structure, which is one of the 3 Zoroastrian temples in the world and is associated with constantly burning fires due to natural gas leaks, is considered an important historical and architectural work of Zoroastrianism and the cult of fire.

13 For more information about the Silk Road see: Peter Frankopan, *The Silk Roads: A New History of the World,* (London: Bloomsbury, 2015).

sources continued to keep its importantce in the commercial and economic activities in the region. Naturally occurring oil was transported through local trade networks to the surrounding regions. In particular, the oil extracted from the Absheron Peninsula was transported in crude form and then shipped to different regions to be used for various functions. During this period, traders developed specialised storage vehicles and transport methods to transport oil, which increased the volume of trade.



The Baku Ateshgah, known as the Temple of fire, early 19th century illustration.

In the 17th and 18th centuries, it is difficult to talk about the existence of Azerbaijan's oil strategy since oil was not yet considered as a commodity of profit. By the 19th century, Azerbaijan began to experience a major transformation in the oil sector. The industrialisation of Baku and the first steps of the modern oil industry represent one of the most important turning points in the region's energy history. During this period, the Russian Empire's control over Baku led to a more systematic exploitation of the region's oil reserves. In the mid-19th century, with the development of modern oil drilling techniques, Azerbaijan's oil production began to attract global at-

tention. The drilling of the first mechanical oil well near Baku in 1846 was a first in the world energy history and quickly turned the region into a centre of interest for international capital.

Although Azerbaijan's acquaintance with oil began in the early centuries, by the 18th and 19th centuries, it began to attract the attention of European explorers and diplomats, which revealed the economic and strategic value of Azerbaijan's energy resources and paved the way for the rapid development of the oil industry in the region both locally and internationally. In the 18th century, Russian traveller and naturalist Ivan Lepehin wrote that oil production in Baku was subject to certain regulations and wells were operated by certain families who are going to be mentioned in the next chapter. Lepehin's narratives are important in terms of showing that oil production in the region started to be under state control and commercialised.



People drilling oil in Bibiheybat, 1846

In the second half of the 19th century, the industrialisation of Baku and the introduction of modern tech-

niques in oil production made the region a pioneer in the global energy market. In 1829, Friedrich Parrot, a German traveller who visited the region,[14] stated that oil was produced in Baku with primitive methods, but the wells had great potential. After about two decades, the introduction of the first mechanised drilling well with a depth of 21 metres was a revolutionary development. This drilling of the first mechanised oil well in 1846 was a cutting edge development not only in Azerbaijan but also in the history of world energy. This progress allowed the Russian Empire to implement a more systematic management model in the region and to industrialise oil production on a large scale. Therefore, the French traveller Xavier Hommaire de Hell[15] predicted that the oil deposits in the region would be very large and that Baku would become a major centre for oil production in the future.

It is correct that the inception of the oil refining industry in Baku dates back to 1859, marking a significant milestone in the global energy sector since the first oil refinery was constructed in Baku.[16] By 1863, Djavad Melikov had established a kerosene plant in Baku, which notably introduced refrigeration technology into oil refining processes for the first time worldwide.[17] By

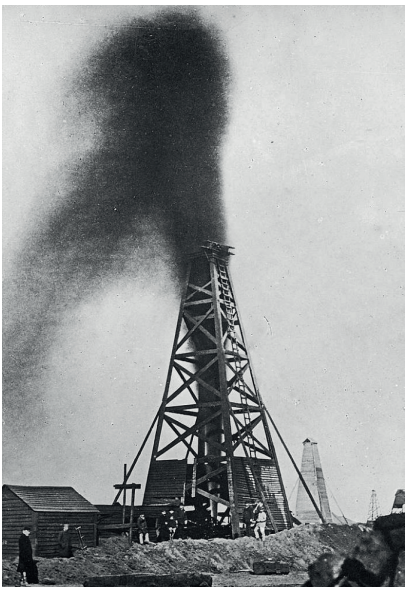
14 Anne L. Troelstra, *Bibliography of Natural History Travel Narratives*, (KNVV Publishing, 2016), 173.

15 Xavier Hommaire de Hell, *Les steppes de la mer Caspienne, le Caucase, la Crimée et la Russie méridionale : Voyage pittoresque, historique et scientifique*, (Paris, 1844), 254.

16 The Ministry of Energy of the Republic of Azerbaijan.

17 Administrative Department of the President of the Republic of Azerbaijan, *Capital*, (Baku: Presidential Library), 19. https://files.preslib.az/projects/remz/pdf_en/atr_paytaxt.pdf.

1867, the region boasted 15 operational oil refineries, underscoring its burgeoning role in the oil industry.



The World's first industrially drilled oil well in Bibiheybat, 1846

Advancements in well-drilling technologies facilitated the discovery of numerous oil wells, including Binegedi, Pirallahi, and Surakhany, which in turn spurred increased oil production, the development of oil infrastructure, and the proliferation of companies engaged in oil extraction, refining, and distribution. This period also saw the emergence of a national bourgeoisie in Azerbaijan, with Baku evolving into a global industrial hub. The industrial method of oil extraction was first implemented in 1871 at the Balakhani-Sabunchu-Ramani oil field on the Absheron Peninsula. To regulate the oil industry, two pivotal laws were enacted in 1872: "On the Excise Tax on Oil Wells and Oil Products" and "Sales of Oil Lands Held by Leaseholders to Individuals." These legislative measures aimed to streamline industry relations and facilitate the auctioning of oil-rich lands, with 15 regions in Balakhani and 2 in Bibiheybat being the

first to be auctioned on December 31, 1872.[18]

During this era, state-owned unused lands were leased for 24-year terms to encourage oil exploration and the development of new fields. Leaseholders were granted the rights to export their produced oil and set its prices, with net incomes from oil sales constituting 14-15% of their revenues. However, the net capital invested in the oil industry represented only 4% of total investments during the 1870s, while mixed capital involving national capital accounted for approximately 10%. By the late 19th century, 49 out of 167 entrepreneurs in the oil sector were Azerbaijanis, representing 24.8% of the industry's entrepreneurial class. Prominent oil magnates such as Zeynalabdin Taghiyev, Murtuza Mukhtarov and Shamsi Asadullayev played instrumental roles in the industry's development. The establishment of the first stock oil company, "Baku Oil Society," in 1874, and the entry of the Swedish Nobel Brothers[19] into the sector in 1876, further catalyzed growth.[20]

The construction of the first oil pipeline in Russia in 1878, spanning 12 kilometers and connecting the Balakhani field to the Baku oil refinery, marked another technological leap.[21] By 1898, the total length of pipelines linking Baku refineries to oil fields reached 230 kilometers, facilitating the annual transport of 1 million tons of oil. The completion of the Baku-Batumi rail-

18 History of Development of Oil Industry. https://azerbaijan.az/en/related-information/130.

19 The Nobel brothers amassed significant assets, including oil fields, refineries, tankers, barges, railroads, and hotels, particularly after the abolition of the excise tax on oil products in 1876.

20 Mirbabayev, *Concise History of Azerbaijani Oil*, 35.

21 Ibid., 205.

way in 1883 further enhanced oil export capabilities to European markets.

Following the latter half of the 19th century, the surge in oil production on the Absheron Peninsula led to a corresponding increase in the transportation of oil and its derivatives, accompanied by advancements in delivery methods. Initially, oil extracted from the mines was stored in wooden barrels or leather sacks, which were then transported via carts or camel caravans to their destinations. However, this method was fraught with inefficiencies, as the barrels frequently ruptured or leaked, resulting in significant product loss. To mitigate these issues, the barrels were treated with kerosene-resistant substances, such as wood glue. Until the 1870s, oil was transported from Baku to central Russia in large 20-pound wooden or iron barrels, as well as on small wooden sailing vessels with capacities ranging from 10 to 15 pounds. This process involved an arduous 600-mile journey across the Caspian Sea to Astrakhan, where the oil was transferred to barges and transported up the Volga River to railway junctions for further distribution. This inefficient system led to substantial losses, with up to 11% of the oil's weight being lost during handling and transit. Even in 1878, attempts by the Baku Oil Society to transport kerosene in iron containers proved unsuccessful due to product degradation caused by abrasion.

The reliance on barrels, ships, and caravans for oil transportation not only resulted in significant losses but also incurred high long-term costs, prompting serious concern among oil industrialists. The industrial production of oil, which began in 1847, coupled with the abolition of the oil quota system imposed by the

Tsarist government in 1872 (during which Azerbaijan was part of Tsarist Russia), marked the beginning of a prosperous era for the Baku oil industry. However, the rapid increase in oil production and the expansion of refining facilities soon led to a transportation crisis. By the 1880s, the accumulation of crude oil in Baku had reached such levels that producers, lacking adequate storage and transport infrastructure, were compelled to halt production and either discard the excess oil into the sea or burn it. This situation underscored the urgent need to establish efficient export channels, particularly to Europe, and to connect Baku, already a major industrial hub, to the Black Sea via railways. Although the idea of such a railway had been proposed as early as the 1830s, practical efforts did not commence until the mid-1850s. Financial constraints, however, led Tsarist Russia to adopt a phased approach to construction. In 1865, contrary to earlier plans, the South Caucasus railway project began not in Baku but in Poti, a port city in Georgia. The 294-kilometer Poti-Tbilisi line was completed in 1872, followed by the authorization of the 548-kilometer Baku-Tbilisi line in 1879. Direct rail service from Baku to Batumi was inaugurated in May 1883, transforming Batumi from a small settlement into a major global port city, largely due to the influx of Baku oil. The English publicist Michael Brooks said that without Baku oil, Batumi would have remained a merchant outpost and added that it was oil that drove industry and transport in Batumi.[22]

During this period, international interest in

22 MirBabayev, Miryusif. Baku-Batumi- The World's Longest Pipeline, (Baku: Visions of Azerbaijan, 2015) http://www.visions.az/en/news/618/3b2f9122

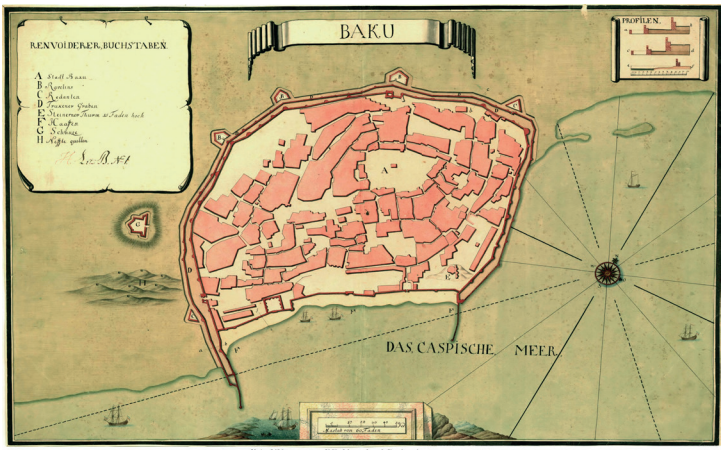
Azerbaijan's oil reserves increased and capital flow to the region accelerated. Western entrepreneurs and Russian industrialists started to operate in Baku's oil fields, which led to radical changes in the infrastructure and economic structure of the region. Especially with the investments of the Nobel brothers and the Rothschild family, Baku oil turned into a global industry. From the 1870s onwards, modern oil refineries were established in Baku and the region became one of the world's largest oil production centres by the early 20th century.

II

EMERGENCE OF A NEW CITY: BAKU

Baku, located on the western shore of the Caspian Sea, has historically been a city characterised by its strategic location. However, the transformation of Baku into a metropolis in the modern sense is closely related to the development of the oil industry that started in the second half of the 19th century. During this period, Baku became an important centre of the world oil market, which radically changed the physical, economic and social structure of the city. At the end of the 1840s, the number of oil wells in Baku was 135, while in the 1850s this number increased to 218. This increase led to a geographical expansion of oil production, and production activities, which had previously been concentrated only in the Balakhani region, expanded to new areas such as Bibiheybat. However, this expansion has reduced the dependence on the labour force of Balakhani peasants and led them to move away from their traditional production areas. This situation led to the need for a new

labour force, and in the wells that were dependent on a system of "iltizam"[23], wage labourers brought from outside were employed. This process accelerated peasants' detachment from the land and their participation in the urban labour force, and laid the foundations for Baku's expansion as a modern industrial city.



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Map of Baku drawn in the first half of the 18th century

The rise of Baku is directly related to technological and industrial developments, especially in the oil industry. In 1846, the drilling of the world's first oil well in Baku increased the importance of the region in global energy markets[24]. In 1863, the establishment of the kerosene plant in Surakhani and the start of oil and gas extraction by mechanical methods in 1869 made Baku

23 A system in which the Ottoman state allocated a share of its revenues to individuals in exchange for a fixed payment.

24 Hacı Hasanov, "On the History of Development of the Oil Industry in Northern Azerbaijan at the Crossroads of 19th and 20th Centuries". *Academic Journal of History and Idea*, 10/2 (2023): 391.

one of the leading centres of the modern oil industry.[25] These developments contributed to the growth of Baku not only as an energy production centre but also as an industrial and commercial city. The severe earthquake of 1859 in Shamakhi was an important turning point in the administrative and social structure of Baku. The earthquake that occurred on 29-30 May 1859 completely destroyed the city of Shamakhi and the centre of Shamakhi governorate was moved to Baku by the decree of Tsar Alexander II dated 6 December 1859[26]. With this decision, Baku gained the status of the provincial centre and the population of the city started to increase rapidly. The city's population, which was 13 thousand in 1859, grew significantly due to the attraction of the oil industry and waves of immigration.

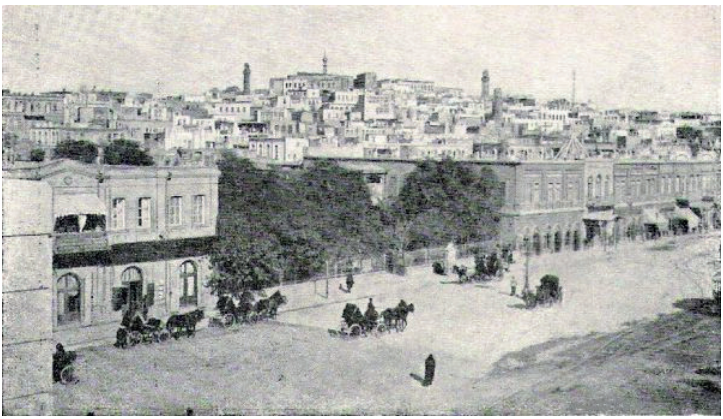
The vast majority of immigrants were men, as it was difficult to find work with their families. Therefore, most of the immigrants had to leave their families behind. According to historical records, Russian specialists and labourers working in the oil industry in Baku usually lived with their families, while most Armenian migrants were single and alone. Muslim migrants, on the other hand, preferred to live alone, leaving their families behind. By 1913, Baku's population had reached 334,000, making it one of the five largest cities in the Russian Empire. The main reason for this population growth was the economic opportunities created by the oil industry and the waves of migration that fol-

25 James. D. Henry, *Baku: An Eventful History*. (London: A. Constable & co., ltd., 1905), 33.; Mirbabayev, *Concise History of Azerbaijani Oil*, 35.

26 Baku district was established within the Caspian governorate, which was organized on April 10, 1840, with the name of Baku as its center. When Shamakhi province was established by the decree of Tsar Nicholas I dated December 14, 1846, Baku district was included in that governorate.

lowed. The majority of immigrants were Russians, but the city also had a significant Armenian, Muslim and other ethnic groups. Population growth also changed the physical structure of the city. New neighbourhoods, factories, refineries and ports were built. In addition, thanks to the oil wealth, cultural and social life in Baku was also revitalised. Theatres, museums, libraries and educational institutions were opened.[27]

Architecture also played an important role in the modernisation process of Baku. In the late 19th and early 20th centuries, European-style buildings were constructed in the city. In particular, the magnificent buildings built by the Nobel brothers and other oil tycoons changed the skyline of Baku. The city became the centre of the oil industry on the one hand, and a centre of culture and art on the other.



Old BAKU City, 1898

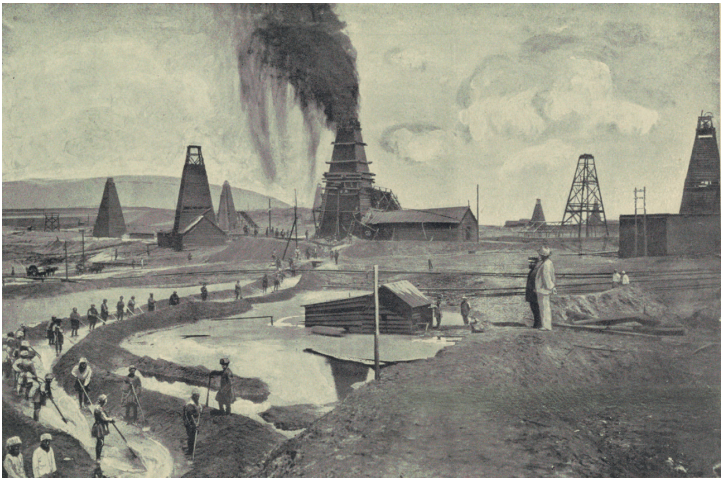
The development of the oil industry also led to the

27 Audrey Altstadt, *The Azerbaijani Turks: Power and Identity under Russian Rule* (Stanford: Hoover Institution Press, 1992), 32.

modernisation of Baku's transport and communication infrastructure. In 1873, with the order to move the factories out of the city, about 100 factories, commercial establishments and residential areas were built in the Black City area. In 1878, the Nobel Brothers took an important step in oil transport by laying the first oil pipeline in the Russian Empire from Balakhani to Black City called Kara City in Azerbaijani language[28]. In 1880, the first 26 km section of the Baku-Tbilisi railway line was completed and in 1883 the full 520 km line was put into service. In addition, the laying of the Baku-Tbilisi telegraph line in 1868, the establishment of the Baku-Krasnovodsk submarine telegraph line in 1879 and the first telephone line in the city in 1886 strengthened Baku's communication infrastructure. After the 1917 Russian Revolution, Baku became part of the Soviet Union. The Soviet government nationalised[29] the oil industry and put Baku's oil resources at the service of the national economy. During this period, oil production in Baku increased further and the city became one of the most important industrial centres of the Soviet Union. However, the development of Baku during the Soviet period was not limited to the oil industry. Significant investments were also made in the fields of education, health and culture.

28 The city used to be called Black City since it was covered with black oil.

29 Stephen Kobrin, "The Nationalisation of Oil Production, 1918–80", in *Risk and the Political Economy of Resource Development Pearce*, ed. David W. Pearce, et al, (London: Palgrave Macmillan,1984), 137.



Oil wells in Baku, Azerbaijan, "Where it Rains Petroleum", 1909

During the Soviet period, Baku also became a centre of science and technology. In order to meet the needs of the oil industry, many research institutes and technical universities were established in the city. These institutions contributed to the development of Baku not only as an oil city but also as a centre of science and education.

The dissolution of the Soviet Union in 1991 marked a decisive juncture in Baku's modern history, as Azerbaijan attained full sovereignty. Foreign direct investment poured into the revitalized energy sector, with a particular emphasis on exploiting offshore Caspian oil and gas reserves. Major projects—most notably the construction of the Baku–Tbilisi–Ceyhan Oil Pipeline—generated renewed global interest in Baku's strategic position within international energy networks. This influx of capital precipitated sweeping transformations in

the urban landscape, exemplified by the emergence of contemporary skyscrapers, upscale shopping centers, luxury accommodations, and new cultural institutions. At the same time, municipal authorities and heritage organizations initiated wide-ranging restoration programs for the Old City and other historic precincts, ensuring that Baku's architectural legacy remained visible amid its evolving metropolitan identity. Through these parallel processes of rapid modernization and cultural preservation, post-independence Baku has reasserted itself as a key player in global energy markets while simultaneously cultivating its status as a vibrant commercial, cultural, and political capital in the broader region.



Old BAKU City, 1920

Baku's contemporary identity is multifaceted, characterized by its enduring prominence in the global energy sector, alongside its emergence as a notable cultural, touristic, and financial center. Benefiting from a strategic location on the shores of the Caspian Sea and boasting a documented history that spans many centuries, the city attracts millions of visitors each year for

both business and leisure. In addition to its well-known status as a hub for international conferences and energy-related events, Baku's extensive calendar of cultural festivals and sporting competitions—ranging from high-profile international sports tournaments to regionally celebrated music and arts festivals—has significantly heightened its global visibility.

Beyond oil and gas production, Baku has significantly diversified its economy, allocating a portion of its hydrocarbon revenues toward the development of advanced infrastructure, healthcare, and educational systems. The city has established a robust ecosystem of universities and research institutes that pursue innovative inquiry in fields such as engineering, information technology, and the social sciences, thus transcending its earlier reliance on resource extraction. These academic and research institutions benefit from collaborations with international partners, positioning Baku as an intellectual node that fosters cross-border exchange of knowledge and expertise. As a result, the city's intellectual landscape is continually enriched by incoming scholars, scientists, and students who contribute to its dynamic atmosphere.



Oil production in Azerbaijan on the stamp, 1920

The synthesis of heritage preservation and modern development is especially evident in Baku's urban fabric, where restored historical neighborhoods coexist with contemporary architecture and infrastructural projects. This interplay has granted Baku the ability to cul-

tivate a unique cultural milieu—anchored by a confluence of local traditions, Soviet-era legacies, and global influences—that simultaneously draws upon its storied past while anticipating future needs. By interweaving historical continuity with forward-looking policies, the city exemplifies an urban center adept at reinventing itself in response to shifting political, economic, and social imperatives, thereby sustaining its relevance as a regional leader and a global destination.



New BAKU City



New BAKU City

III

INTEREST OF FOREIGN AND LOCAL INVESTORS IN BAKU OIL

The development of the Baku oil industry represents a seminal chapter in the history of global energy markets, shaped by the converging interests of both local entrepreneurs and foreign investors. In the latter part of the 19th century, the region emerged as a critical hub for petroleum extraction, a transformation fueled by the visionary investments and technological innovations of local magnates such as Zeynalabdin Taghiyev, Musa Naghiyev, Shamsi Asadullayev, and Murtuza Mukhtarov. These figures harnessed the abundant oil reserves of the Caucasus and pioneered practices that integrated extraction, processing, and transportation, thereby establishing a dynamic national bourgeoisie that played an essential role in both economic and urban development in Baku. Their efforts not only contributed to the rapid industrialization of the city but also laid the groundwork for its future status as a center

of international energy production.

Concurrently, the oil fields of Baku attracted significant attention from prominent foreign investors, notably the Nobel Brothers and the Rothschild family. The Nobel Brothers, whose name became synonymous with the burgeoning oil industry, actively partnered with local enterprises to introduce advanced technologies and expand production capacities. Their involvement in the development of infrastructure and management of extraction operations accelerated the commercialization of Baku oil, integrating it into the broader framework of the global energy economy. The Rothschild family, with its far-reaching financial influence and strategic acumen, complemented these efforts by investing in essential logistical networks that ensured the efficient export of oil to European markets. Through the establishment of critical transportation links, including railway lines and tanker fleets, the Rothschilds not only generated substantial profits but also exerted considerable influence over energy policies and trade practices during a period marked by rapid industrialization and the globalization of financial markets.

The intricate interplay between local and foreign investment in Baku oil created a multifaceted economic landscape where technological innovation, capital accumulation, and strategic foresight converged. Local investors like Zeynalabdin Taghiyev, Musa Naghiyev, Shamsi Asadullayev and Murtuza Mukhtarov exemplified entrepreneurial ingenuity, driving advancements in drilling technology, refining processes, and urban development. Their contributions extended beyond the immediate realm of energy production; they also invested in social and cultural projects, thereby transforming

Baku into a vibrant metropolis that reflected both its rich historical legacy and modern industrial prowess. At the same time, the involvement of the Nobel Brothers and the Rothschild family introduced a layer of international financial expertise and global market integration, ensuring that the oil produced in Baku reached distant consumers and maintained its competitive edge in the international arena.[30]

The legacy of these diverse investments remains significant despite later political efforts to downplay their contributions. After the overthrow of the Azerbaijan Democratic Republic, the socialist revolution of 1920 tried to make people forget Taghiyev, Naghiyev, Asadullayev, Mukhtarov and others, who were considered to be its great and national bourgeoisie, which had been formed for years, to be the great and national bourgeoisie of the country, through the years. Yet, the historical record reveals that the collaborative endeavors of local magnates and foreign financiers were instrumental in not only transforming Baku's oil industry but also in shaping the broader contours of global energy markets. Their joint legacy is evident in the technological innovations, infrastructural developments, and cultural institutions that continue to define the city's identity. In this context, the interplay of foreign and local investments in Baku oil serves as a compelling example of how financial, technological, and geopolitical factors can converge to drive economic transformation, leaving an enduring impact on both regional development and international trade.

30 Telman Nusretoğlu, "Rotşildler ve Bakü Petrolü", *Akademik Tarih ve Düşünce Dergisi*, 8(3), (2021): 1025



ZEYNALABDIN TAGHIYEV



Zeynalabdin Taghiyev with his family

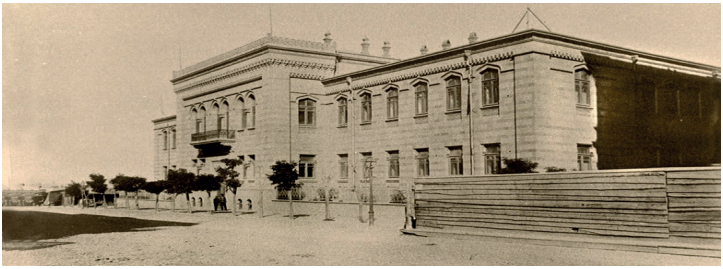
Zeynalabdin Taghiyev (1838–1924) was a prominent Azerbaijani entrepreneur and philanthropist whose influence on the nascent oil industry in the late nineteenth and early twentieth centuries was instrumental in positioning Baku as a global center for petroleum production. Through strategic investments and partnerships, he emerged as one of the leading capitalists of the period. In 1873, Taghiyev and his associates acquired land from the state with the intention of prospecting for oil; within two years, their discoveries propelled him into the ranks of Azerbaijan's wealthiest individuals. In 1877, he founded T.Z. Taghiyev Trade House, which oversaw the interconnected processes of drilling, production, and transportation of oil—a vertically integrated model that underscored his vision for expanding the industry. Although Taghiyev withdrew from oil ventures by 1897, his stature in this pivotal sector had already left an indelible mark on the country's economic develop-

ment. Regrettably, following the Soviet occupation of Azerbaijan, his remaining assets were confiscated, curtailing his direct involvement in business enterprises.

Beyond his commercial success, Taghiyev played an equally significant role in socio-economic, educational, and cultural initiatives. A fervent supporter of infrastructural development, he channeled considerable portions of his oil-derived income back into Baku and its surrounding areas. Among his notable endeavors was the cultivation of collaborative networks among local oil magnates, uniting them behind large-scale projects designed to enhance urban amenities and public services. Taghiyev personally financed multiple undertakings, including the construction of Baku's first theater, thus fostering a cultural renaissance that reflected both local traditions and broader cosmopolitan influences. Furthermore, his philanthropy extended to educational pursuits: Taghiyev granted numerous scholarships to Muslim students seeking higher education across various regions of the Russian Empire, thereby nurturing a new generation of skilled professionals and intellectuals.



Baku's first theatre building



The first and only secular girls' school in the Muslim East

One of Taghiyev's most transformative contributions was the establishment of the first and only secular girls' school in the Muslim East, a pioneering project that exerted a profound influence on educational reform and gender norms in Azerbaijan. By advancing women's access to formal education, he laid the groundwork for broader social change, challenging traditional expectations and opening avenues for the intellectual and professional development of women. This commitment

to progressive ideals underscores Taghiyev's lasting legacy as both a business pioneer and a social innovator, whose philanthropy, cultural investments, and advocacy for education shaped the trajectory of modern Azerbaijan.



MUSA NAGHIYEV

Musa Naghiyev (1849–1919) was a prominent Azerbaijani oil entrepreneur and philanthropist who amassed considerable wealth through his extensive petroleum operations, primarily in the Bibiheybat region. His initial success in Bibiheybat enabled him to acquire additional oil fields in Sabunchu, Ramana, Balakhani, and Surakhani, where he established 45 technically advanced and highly productive wells, as documented in contemporary records. Naghiyev also expanded into downstream activities by constructing an oil processing plant in the district then known as the Black City, coupled with transportation operations across the Caspian Sea. These endeavors elevated Naghiyev to a position of exceptional affluence, distinguishing him not only among Baku's entrepreneurial class but throughout Azerbaijan as a whole.



Monogram of Musa Naghiyev

Over the course of his career, Naghiyev reinvested a substantial portion of his fortune into the urban development of Baku. He was particularly active in the real estate sector, where he financed and oversaw the construction of approximately 98 major buildings, many of which remain architectural landmarks. He had a monogram in Cyrillic with the initials of his name and surname added to the buildings he built in order to recognise that they were



Musa Naghiyev's son Ismayil Naghiyev

built by him.[31] One of his notable contributions to education was his role as the principal sponsor of a leading technical college that would later become the Azerbaijan State Economic University. In 1912, Naghiyev funded the erection of the city's largest hospital, a facility that continues to operate under the Ministry of Health. Notably, the hospital's architectural plan was designed in the shape of the Cyrillic letter "H," corresponding to the initial of Naghiyev's surname and serving as a lasting testament to his patronage.

The Ismailiyya Palace, situated on Istiglaliyyat Street in Baku, Azerbaijan, stands as a testament to early 20th-century architectural patronage and cultural philanthropy. Commissioned by the affluent oil magnate Musa Naghiyev, the palace was constructed between 1908 and 1913 in memory of his son, Ismayil, who succumbed to tuberculosis at a young age. Naghiyev entrusted Polish architect Józef Płoszko with the design, resulting in a structure that not only commemorated his son but also served as the headquarters for the Muslim Charity Society.

Architecturally, the Ismailiyya Palace is distinguished by its Venetian Gothic style, a design choice inspired by Naghiyev's admiration for the Palazzo Contarini degli Scrigni e Corfu in Venice, which he encountered during his son's treatment in Switzerland. The building's façade features intricate stone carvings and pointed arches, characteristic of Gothic architec-

31 The wreaths of spikelets on the sides of the 'Hambal Şələsi' ('Hambal Şələsi' is a method of tying used to carry loads at the waist.), the monogram 'M,H' in the centre with the initials of his first and last name in Cyrillic alphabet are indications that Musa Naghiyev has not forgotten his past as a porter and that his father was a straw seller.

ture, while incorporating local design elements that harmonize with Baku's urban fabric. Notably, golden inscriptions once adorned the front and side facades, indicating its dedication to the Muslim Charity Society.



The Ismailiyya Palace

Throughout its history, the palace has undergone significant transformations. During the March Days of 1918, it sustained considerable damage due to fire and warfare. Subsequently, in 1923, under the guidance of architect Alexander Dubov, the building was restored, during which the original inscriptions were removed. Over the years, it has housed various organizations, including the Azerbaijan Society for Scientific Research and Studies and the Azerbaijan State Scientific Research Institute. Presently, the Ismailiyya Palace serves as the Presidium of the Academy of Sciences of Azerbaijan, continuing its legacy as a center for intellectual and cultural endeavors. Through such wide-ranging investments and philanthropic initiatives, Naghiyev not only

influenced the early evolution of Baku's oil industry but also helped to shape the city's educational, medical, and cultural landscape, thereby solidifying his reputation as one of Azerbaijan's foremost benefactors and entrepreneurs.



Ismailiyya Palace on USSR stamp, 1950

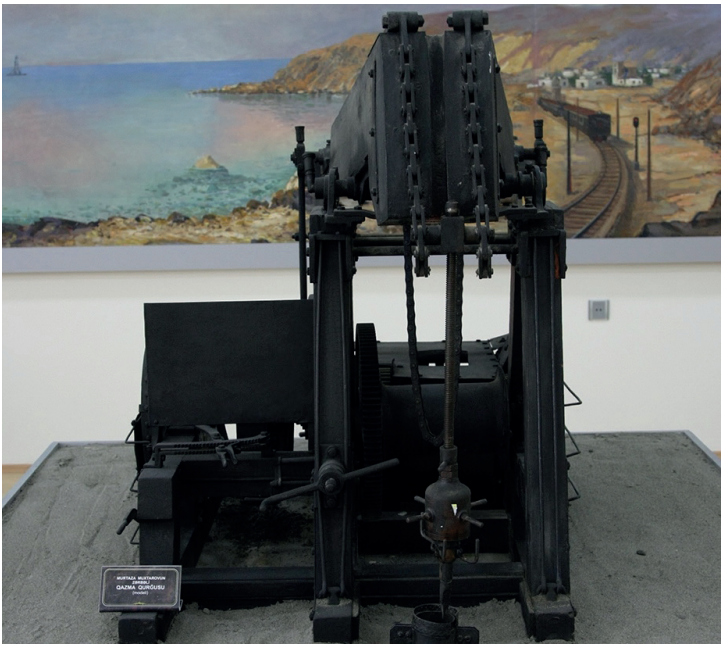


Ismailiyya Palace on Azerbaijan stamp, 2012



MURTUZA MUKHTAROV

Murtuza Mukhtarov (1857–1920) was a preeminent Azerbaijani oil industrialist whose contributions to drilling technology and oil extraction played a critical role in the transformation of Baku into a major center of the global petroleum industry. In 1890, he established his own drilling company, which rapidly expanded into comprehensive oil production. His enterprise specialized in the manufacture of machinery for derricks and drilling rigs, thereby facilitating the systematic development of oil fields in regions such as Balakhani, Surakhani, Ramana, and Sabunchu. Notably, a majority of the wells in these areas were drilled using the "Podrat Drill" rig—a testament to the advanced technological methods Mukhtarov championed. His innovations in drilling technology not only enhanced local production capacities but also garnered international acclaim, with his proprietary drilling tool being widely exported under his name.



Mukhtarov's drilling rig, 1995

Mukhtarov's impact extended beyond technological innovation to include significant industrial and commercial achievements. Following the establishment of the "Murtuza Mukhtarov" society, his pioneering work spurred the emergence of several prominent contract drilling companies and mechanical workshops—including enterprises such as "Hammer," "Rapid," "Wotan," and "Robur"—within the broader framework of the Russian Empire. His dominance in the industry was further underscored by his ownership of all oil wells along the Baku-Buzovna railway corridor, an achievement commemorated by naming a railway station "Mukhtarovka" in his honor near Sabunchu. In 1895, he further advanced the field by pioneering a

drilling rig that utilized metal rods—a breakthrough for which he secured state copyright and subsequently termed the "Baku Drilling System." Toward the end of the nineteenth century, Mukhtarov founded a drilling equipment plant in Bibiheybat, recognized as the first oil equipment manufacturing facility of its kind. His subsequent patent of a percussion drilling rig, designed for drilling wells to depths of up to 1,100 meters, became widely adopted and further cemented his legacy as an innovator in drilling technology.

In addition to his industrial achievements, Mukhtarov made substantial contributions to the socio-economic and cultural development of the region. Recognizing the importance of supporting the workforce that powered his enterprises, he constructed multi-story residential buildings near his plant to provide adequate housing for workers, thereby generating new employment opportunities and fostering ancillary economic activities. His commercial reach extended beyond Baku, as he established contractual partnerships with local oil barons in regions such as Maykop and Grozny, and maintained productive technical and business collaborations with factory and oil mine owners in the North Caucasus. Equally noteworthy were his philanthropic endeavors: Mukhtarov founded a boarding school for impoverished and orphaned girls, highlighting his commitment to educational advancement and social welfare. His architectural legacy endures in Baku through several preserved structures, most notably the Mukhtarov Palace located on Istiglaliyyat Avenue.

The Səadət Palace, also known as the Palace of Happiness, is an architectural landmark situated in Baku, Azerbaijan. Constructed in 1912, the pal-

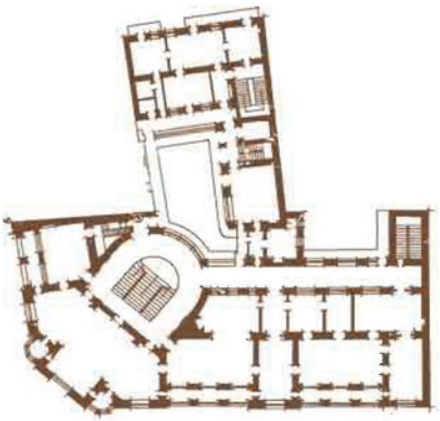
ace was commissioned by the affluent oil magnate Murtuza Mukhtarov as a gift for his wife, Liza-Khanym Tuganova, whom he deeply adored. The building symbolizes both personal devotion and the broader era of economic prosperity brought about by Baku's oil boom in the early 20th century. The palace's purpose was initially residential, serving as the private residence of the Mukhtarov family, but its history would take a tragic turn following the Soviet occupation of Azerbaijan in 1920, during which Mukhtarov is said to have taken his own life after resisting Bolshevik forces.

Architecturally, the Səadət Palace is a striking example of neo-Gothic style, a rarity in Baku, which is more commonly known for its blend of Islamic and European architectural influences. The palace features pointed arches, intricate stone carvings, and ornate facades, reflecting the grandeur typical of Gothic Revival architecture. The building's design was influenced by French Gothic aesthetics, specifically inspired by a palace the Mukhtarovs admired during their travels in Europe. The detailed craftsmanship and imposing structure make it one of the most distinctive buildings in Baku.



The Səadət Palace / Palace of Happiness

Following the Soviet takeover, the palace was na-



Plan of Səadət palace

tionalized and repurposed as the Palace of Marriage Registrations, a function it retains to this day. Despite the political and social upheavals that have occurred since its construction, the building has been well-preserved and remains a significant cultural and historical symbol in Azerbaijan. It not only serves as a venue for civil ceremonies but also stands as a testament to the city's rich architectural heritage and the personal histories intertwined with its development.



SHAMSI ASADULLAYEV

Shamsi Asadullayev (1840–1913) was a seminal figure in the Azerbaijani oil industry whose entrepreneurial initiatives and technological innovations played a critical role in transforming Baku into a major center for petroleum production. During the mid-nineteenth century, as the oil business in the region experienced rapid expansion, Russian investors acquired extensive tracts of land in strategic areas such as Surakhani and Amirjan to establish oil refineries. This influx of foreign capital and industrial activity precipitated significant socio-economic shifts; many local agrarians, dispossessed of their lands, were compelled to enter the burgeoning oil sector. Initially commencing his career at a refinery, Asadullayev quickly advanced within the industry, eventually assuming the role of subcontractor for both oil and salt producers. His acute business acumen and strategic foresight enabled him to co-found an oil company in 1890 alongside other leading industrialists. This enterprise rapidly distinguished itself as one of Baku's twelve principal oil firms, at one stage contributing to approximately 60% of the region's overall oil output.

Asadullayev's innovative contributions were not confined solely to oil extraction but extended significantly into the realm of oil transportation and export logistics. Recognizing the limitations of conventional methods, he pioneered the introduction of steam-powered transportation to facilitate the shipment of oil across the Caspian Sea. In 1891, he expanded his commercial operations by acquiring three barges, thereby enhancing the capacity to export oil from Baku to markets in Russia. By 1893, Asadullayev had evolved into an independent entrepreneur, consolidating his business interests under sole ownership. His career was marked by several transformative breakthroughs, most notably in 1895 when an

oil gusher erupted on one of his newly acquired properties—continuing unabated for 56 days—which substantially amplified his production output and consolidated his market position. Subsequent to this event, his operations expanded geographically, with increasing exports channeled through the Volga River and the establishment of oil refineries in key urban centers including Moscow, various Polish localities, regions in Central Asia, and even Iran. By 1910, Asadullayev had secured control over 37 oil wells—17 of which were characterized by continuous and escalating production—while his mining operations between 1908 and 1912 yielded an annual production of 6 to 8 million pounds of oil. His aggressive pricing strategies and competitive business practices earned him the epithet "the thunderstorm of the Nobels," reflecting his persistent challenges to the dominance of the Nobel brothers' oil empire across diverse regions such as Russia, Turkestan, Iran, and Finland. By 1913, the capital of his enterprise had swelled from an initial investment of 500 manats in 1893 to an impressive 10 million manats, underpinned by a diversified portfolio that included mechanical workshops, multiple refineries in Sabunchi, Surakhani, and Ramana, and a robust fleet operating on the Caspian Sea. In 1903, he further broadened his influence by relocating to Moscow, thereby diversifying his investments across broader geopolitical and economic contexts.

Parallel to his industrial achievements, Asadullayev demonstrated a profound commitment to philanthropy and social development, endeavors that left an enduring imprint on the cultural and infrastructural landscape of Azerbaijan. Recognizing the strategic importance of maritime power, he played a pivotal role in the construction of the Azerbaijani navy, an initiative de-

signed to enhance the region's economic security and geopolitical leverage. His investments in real estate extended beyond Baku to encompass properties in prominent cities such as St. Petersburg and Moscow, thereby reinforcing his stature as a multifaceted entrepreneur. Within Baku itself, he financed the construction of several mansions in the city center, contributing to an architectural legacy that continues to resonate today. His philanthropic initiatives further included the establishment of a school for underprivileged children, which sought to democratize access to education and foster social mobility. Additionally, he donated a mansion to serve as a Muslim cultural center—later known as the Tatar House—which evolved into a vibrant hub for cultural and intellectual exchange. In recognition of his significant contributions to education, Asadullayev founded two scholarships at the Tbilisi Institute of Teachers in 1913, commemorating the 300th anniversary of the Romanov dynasty.

Despite the breadth and depth of his accomplishments, the political transformations that followed the fall of the Azerbaijan Democratic Republic in 1920 precipitated the abrupt disintegration of his extensive business empire. With the advent of the new communist regime, Asadullayev's vast array of properties and business assets were nationalized, effectively dismantling his industrial and commercial enterprises. Nevertheless, his pioneering contributions to the oil industry, his innovative approach to oil transportation and export, and his substantial philanthropic investments continue to be recognized as integral components of Azerbaijan's economic and cultural heritage. His legacy endures as a testament to the transformative impact of visionary entrepreneurship in the early stages of the modern oil

industry and as a model of corporate social responsibility in a rapidly changing socio-political landscape.



NOBEL BROTHERS AND BRANOBEL OIL COMPANY



Nobel Brothers

The Nobel family, originally from Sweden but later operating extensively in the Russian Empire, played a transformative role in the development of the global petroleum sector. While Alfred Nobel (1833–1896) is widely recognized for inventing dynamite and founding the Nobel Prize, the family's wealth and influence were significantly bolstered by their pioneering activities in the Baku oil fields.

During the latter half of the nineteenth century, the Russian Empire faced a growing industrial demand for new energy sources, and oil from the Caspian Sea region—most notably from Baku—offered substantial potential to satisfy these needs. Baku's oil reserves were among the largest in the world, attracting international attention. Against this backdrop, Robert Nobel (1829–1896), one of Alfred Nobel's brothers, identified the region's commercial promise during the early 1870s. Realizing that traditional sources of energy such as coal would not suffice for Russia's burgeoning industrial apparatus, the Nobel family decided to invest heavily in Baku's oil fields.

By 1873, Robert and his brother Ludvig Nobel (1831–1888) had begun acquiring oil-rich lands in the Baku region. Their focus encompassed both exploration and the establishment of advanced production techniques, driven by the recognition that modernizing oil extraction would yield substantial economic returns. These initial

ventures set the stage for the founding of the Nobel Brothers Oil Company (Branobel) in 1879, an entity that would soon revolutionize the Russian oil industry.[32]

In May 1879, Alfred, Robert, and Ludvig Nobel, in collaboration with Baron Peter Bilderling, established Branobel. The formation of this company signaled a strategic consolidation of capital and expertise, with the explicit goal of modernizing oil extraction, refining, and transportation. Branobel rapidly gained a formidable reputation, largely due to the Nobel family's insistence on technological innovation[33]. By integrating cutting-edge methods such as steam-powered drilling rigs, the company enhanced both the efficiency and the safety of oil extraction. This focus on modernization represented a significant departure from prevailing practices in the region, where oil extraction and refining were still primarily labor-intensive and technologically rudimentary.

A hallmark of the Nobel family's contribution to the oil industry was their radical overhaul of transportation methods. Historically, oil had been shipped in wooden barrels, a system prone to leakage, contamination, and considerable loss of product. Recognizing the necessity of a more efficient delivery mechanism, the Nobel Brothers introduced railway tankers as a means to transport crude oil and refined products. This innovation led to a decline in transportation costs and minimized product wastage, substantially increasing the profit-

32 Charles Van Der Leeuw, *Oil and Gas in the Caucasus & Caspian A History* (Surrey: Curzon Press, 2000), 90.

33 Fərhad Ağazadə, "Bakı Neft Ticarəti və Onun Müxtəsərcə Tarixi II" in *Azərbaycan Qəzeti.* volume (3) (Baku: ADA University press, December 1918), 156.

ability of Baku's petroleum exports. Arguably the most important breakthrough occurred with Ludvig Nobel's construction of the world's first dedicated oil tanker, named Zoroaster, in Motala, Sweden, in 1877[34]. Launched in 1878, the Zoroaster was a steel-hulled vessel designed to carry large volumes of oil in specifically engineered metal tanks. This approach eliminated the inefficiencies and hazards associated with wooden barrels on ships. Within a short period, the Nobel Brothers commissioned a fleet of such tankers, enabling Branobel to establish a robust and highly integrated distribution network. Coupled with over 2,000 railway tank cars and an extensive system of storage facilities in key Russian cities—ranging from Nizhny Novgorod to Astrakhan—this fleet allowed Branobel to move oil products more quickly, safely, and cost-effectively than any competitor at the time.[35]



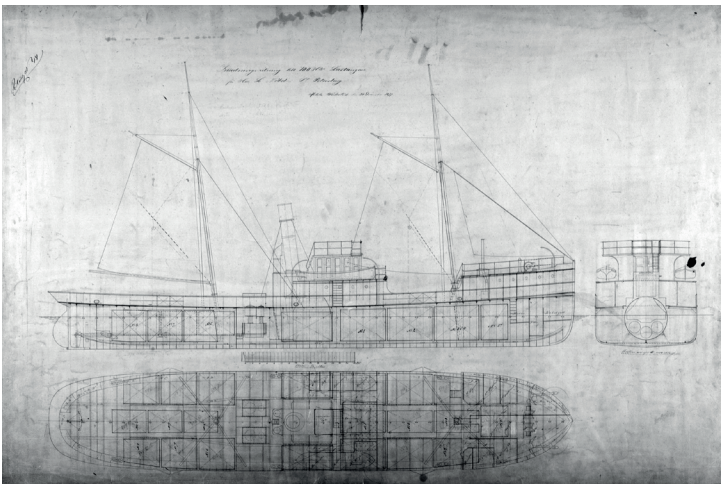
Nobel Brothers Company oil transportation, 1881

34 Bengt Jangfeldt, *The Nobel Family: Swedish Geniuses in Tsarist Russia,* translated by Harry D. Watson,(London: Bloomsbury Publishing, 2023), 184.

35 Mirbabayev, *Concise History of Azerbaijani Oil*, 56-57.



The world's first oil tanker, the 'Zoroaster'



Engineer Olof Bengtsson's drawing of 'Zoroaster'

By the turn of the twentieth century, Branobel had evolved into one of the world's most influential oil companies. Its infrastructure included 40 production facilities, five refineries, seven large factories, and 150 warehouses, alongside a sizable workforce of approximately 12,000 employees. This extensive network not

only served the domestic Russian market but also supplied emerging global markets where industrial modernization was accelerating. During the company's 25th anniversary in 1904, the Ateshgah—a Zoroastrian fire temple located in the vicinity of Baku—was chosen as Branobel's emblem, reflecting the Nobel family's fascination with Zoroastrianism and the region's historic religious traditions centered around eternal flames.[36]

Despite its successes, Branobel's operations came to a swift and dramatic end following the Bolshevik Revolution of 1917. As political power shifted in Russia, the new government moved to nationalize major industries, including oil. The Nobel family's assets were seized, forcing them to leave the country and forfeit the considerable investments they had made over the preceding decades. Nevertheless, the innovations pioneered by the Nobels—and the infrastructure they left behind—continued to underpin the Soviet oil industry's subsequent growth.

One of the less discussed yet equally significant facets of the Nobel family's presence in Baku was their commitment to the welfare of their workers and the broader community. Recognizing the importance of stable, healthy, and educated labor, the Nobels invested heavily in social and infrastructural projects. They built modern housing facilities, hospitals, and schools in the oil-producing areas, aiming to improve living conditions for both local workers and the foreign specialists they recruited.

Additionally, the Nobels established a settlement

36 Nobel Brothers. Gösta Nobel Tries to Save What can be Saved (2011). https://www.branobelhistory.com/the-nobel-brothers/gosta-nobel-tries-to-save-what-can-be-saved/.

known as the "Black City," [37] so named because of the pervasive black soot and oil residue that covered much of the industrial complex. Within this district, they constructed a housing colony for workers from Finland, Sweden, Norway, and Germany—nations whose expertise in various industrial processes was essential to Branobel's productivity. The family themselves resided in Villa Petrolea, an elegant estate that served as a symbol of the company's prosperity and progressive outlook. Beyond these residential investments, the Nobel brothers were instrumental in introducing electricity to the region, thereby laying the groundwork for modern infrastructure projects that would benefit Baku's residents long after their departure.

The Nobel family's role in advancing science and technology extends beyond the oil industry. Alfred Nobel, whose inventions included dynamite and other explosives, was deeply concerned about the potential misuse of scientific discoveries. Convinced that the advancement of knowledge could serve as a catalyst for peace, Alfred bequeathed much of his fortune to establish what would become the Nobel Prizes in Physics, Chemistry, Medicine, Literature, and Peace. While the Nobel Prizes are financed through Alfred Nobel's estate broadly, historical records indicate that as much as 12% of the initial funds derived from the family's oil revenues in Baku. This infusion of capital into scientific, cultural, and humanitarian pursuits thus symbolizes the transformative potential of the industrial wealth that the Nobels accumulated.

The Nobel Peace Prize, in particular, underscores

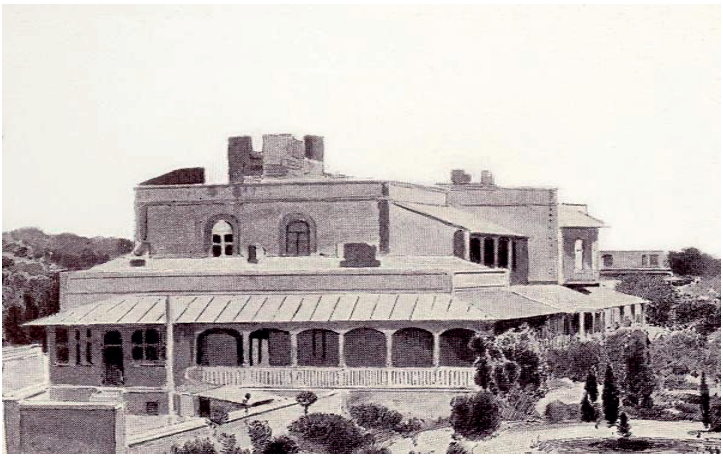
37 However, this city was completely cleaned off from the oil and a new city called White City was started to set up within the borders of Baku in 2011.

Alfred Nobel's hope that scientific and cultural achievements would foster collaboration among nations. By recognizing individuals and organizations that promote reconciliation and social progress, the Nobel Prize has become one of the world's most prestigious accolades, reinforcing the idea that technological progress should be harnessed in the service of humanity rather than merely for profit or power.[38].

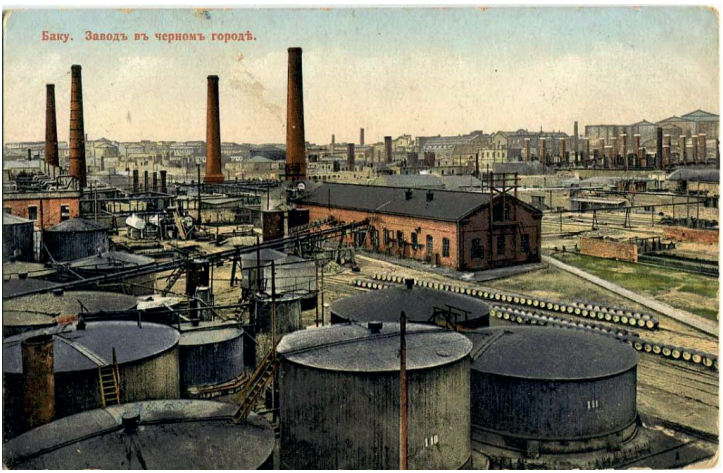


First Nobel Prize, 1901

38 Elmira Muradaliyeva, *Toprağın Kanı: Bakü Petrolünün Kısa Tarihi*, Çev. Uğur Büke, (İstanbul: TEAS Press, 2017). 52.



Villa Petrolea[39]



The BLACK City (Qara Şəhər)

39 Villa Petrolea was renovated by Baku Nobel Heritage Fund in 2007.



Villa Petrolea 2025



The WHITE City (Ağ Şəhər)



ROTHSCHILD FAMILY

In the final decades of the 19th century, the Rothschild Family emerged as a paradigmatic example of global financial and industrial power, extending its reach into diverse economic sectors including the burgeoning field of energy resources. Among these strategic ventures, the family's investments in the oil deposits of Baku represent a critical juncture in both their own economic trajectory and the evolution of international energy markets. Baku, situated in the Caucasus region within the Russian Empire, was renowned for its abundant oil reserves—a natural resource whose exploitation not only generated substantial wealth locally but also began to reshape the global economic landscape. The Rothschilds' calculated involvement in Baku's oil industry thereby serves as an instructive case study in the intersection of international finance, industrial modernization, and geopolitical strategy during a period marked by rapid industrialization and significant technological change. [40]

The Rothschilds' interest in oil, and particularly in the oil reserves of Baku, must be understood within the broader context of their global economic strategies. By the late 19th century, the family had already established a reputation for discerning investments in sectors that promised long-term growth and influence. Oil, as a commodity, was rapidly ascending in importance due to the acceleration of industrialization and the parallel development of modern transportation networks. Recognizing early the transformative potential of petroleum as both an energy source and an economic commodity, the Rothschilds sought to secure a foothold in this nascent market. Their strategic foray into Baku's oil

40 Mirbabayev, *Concise History of Azerbaijani Oil*, 146-147.

industry was not merely an opportunistic financial venture; rather, it was an integral component of a broader vision aimed at integrating energy resources with the family's expansive network of financial and logistical operations.

In the 1880s, the French branch of the Rothschild dynasty initiated its involvement in Baku's oil production and distribution activities. This period marked the beginning of a sustained commitment to the region, as the family engaged in a series of financial and operational collaborations designed to enhance the exploitation of Baku's oil reserves. A key element of this early engagement was the Rothschilds' cooperation with Branobel—the Nobel Brothers Oil Company—which had rapidly become a dominant force in the Baku oil industry. By purchasing shares in Branobel and actively financing the necessary infrastructure investments, the Rothschilds ensured that the oil extracted from the rich fields of Baku could be efficiently transported to international markets. Their investments in this regard were instrumental in transforming Baku into a critical node in the global oil supply chain.

On May 16, 1883, Rothschild barons, who were actively involved in oil production and trade in Baku, founded the "Caspian-Black Sea Oil Production Trade Association" in Baku and built its head office. This building currently serves as the Office of the Chief Prosecutor of the Republic of Azerbaijan. The construction of the head office (presidential office) of the Rothschild millionaires in Baku was necessary due to the success of their business. Later, the Caspian-Black Sea Oil Company was established in 1886, further emphasizing the Rothschilds' commitment to the region and their in-

fluence over the oil industry. This venture, designed to streamline and enhance the transportation of oil from Baku, laid the groundwork for the integration of local production with broader international trade networks. By 1890, the Rothschild bank had secured control over 42 percent of Baku's oil exports—a figure that not only attested to the financial acumen of the family but also highlighted the strategic importance of their investments. At a time when Azerbaijan's oil production was approaching its zenith, with output peaking at 11 million tons in 1901 and accounting for over 50 percent of global production, the Rothschilds' financial and logistical infrastructure played a pivotal role in ensuring that Baku oil reached Western markets efficiently.



The Caspian-Black Sea Oil Production Trade Association, 1883/ The General Prosecutor's Office of the Republic of Azerbaijan

Central to the success of the Rothschilds' involvement was their recognition of oil's strategic importance beyond its immediate commercial value. The accelerating pace of industrialization, coupled with the advent of modern transportation methods, transformed oil into a commodity of immense geopolitical and economic significance. In anticipation of these trends, the Rothschilds invested heavily in developing the logistical networks required to transport oil from Baku to Europe. Their investments in railway lines and tanker fleets were particularly significant, as these infrastructural elements enabled the efficient movement of large quantities of oil

via the Caspian Sea and provided a vital connection to the Black Sea. Such strategic investments not only facilitated the export of Baku oil but also reinforced the Rothschilds' position as key intermediaries in the global energy market. Through these measures, the family effectively harnessed their financial expertise to influence the dynamics of international energy trade, thereby enhancing both their own economic power and the broader commercial viability of the Baku oil industry.



Workers of the Rothschilds', Bibiheybat oil fields

The influence of the Rothschilds in Baku, however, was not destined to persist indefinitely. The early decades of the 20th century witnessed significant political and economic upheavals that would dramatically alter the contours of the region's oil industry. The Russian Revolution of 1905 introduced a period of profound instability, while the subsequent onset of World War I further disrupted established economic networks and undermined investor confidence. These tumultuous events began to erode the stable environment in

which the Rothschilds had once thrived. The situation was compounded by the Bolshevik Revolution of 1917, which led to the nationalization of the oil industry under the new Soviet regime. In this radical reordering of economic priorities, the extensive investments of both the Rothschild family and their contemporaries, such as the Nobel brothers, were effectively nullified. The Soviet government's decision to assert control over the oil industry terminated the direct financial relationships that had underpinned the Rothschilds' engagement with Baku oil, marking the end of an era of significant Western financial intervention in the region.

Despite the eventual decline of their direct involvement, the legacy of the Rothschilds' investments in Baku oil remains an important subject for historical inquiry. Their strategic engagement with Baku not only underscores the financial prowess of one of the world's most influential families but also reflects the broader energy policies and geopolitical dynamics of the late 19th and early 20th centuries. The manner in which the Rothschilds leveraged their resources to secure a dominant position in Baku's oil exports illustrates the complex interplay between international finance, technological innovation, and state policies during a transformative period in global economic history.

In sum, the Rothschild Family's foray into the oil industry in Baku encapsulates a critical moment in the evolution of global energy markets. Their early recognition of oil's potential, combined with a strategic investment in both production and transportation infrastructure, enabled them to exert considerable influence over one of the most important sources of energy at the time. Although political revolutions and economic in-

stabilities ultimately curtailed their direct involvement, the financial and logistical frameworks they established during the late 19th century significantly shaped the subsequent development of the Baku oil industry. As such, the Rothschilds' engagement with Baku oil remains a paradigmatic example of how global economic strategies and energy policies intersected to forge new pathways in industrialization and international trade. Their legacy, marked by both financial innovation and strategic foresight, continues to inform contemporary analyses of the historical development of energy markets and the enduring impact of international finance on regional economies.

IV

DEVELOPMENT OF THE OIL INDUSTRY AFTER THE SOVIET OCCUPATION

Azerbaijan has historically been at the center of global energy production, with its vast oil reserves shaping the nation's political and economic trajectory. The discovery and exploitation of oil in Baku marked the beginning of Azerbaijan's integration into the global energy market, making the region one of the most valuable oil-producing centers in the world. The development of Azerbaijan's oil industry must be understood within the broader context of its geopolitical importance. Positioned at the crossroads of Europe and Asia and endowed with substantial energy resources, Azerbaijan was viewed as a strategic asset by both regional and global powers. Therefore, the control of its oil reserves was a key factor in the political struggles that defined the country's early modern history. The transition from private ownership during the late Russian Empire to

state control under the Soviet regime illustrates how oil became both a tool of economic development and an instrument of political dominance.

As the oil industry in Baku grew, countries like Russia and Britain competed for influence over Azerbaijan's oil wealth. This competition intensified in the early 20th century, particularly during the brief existence of the Azerbaijan Democratic Republic (ADR) and following the Soviet occupation in 1920.



The first building of the Government of Azerbaijan Democratic Republic, Ganja

The Azerbaijan Democratic Republic (ADR), established on May 28, 1918, was the first democratic parliamentary republic in the Muslim world. Despite its short-lived existence, the ADR sought to implement an independent economic policy that included measures

to assert national control over Azerbaijan's vast oil resources. However, the new government faced substantial challenges, including internal political instability, economic hardship, and foreign intervention. At the time of the ADR's establishment, the Azerbaijani oil industry was largely dominated by foreign companies, with significant investment from British and Russian enterprises. The oil fields of Baku, which had already gained global prominence by the early 20th century, were crucial to Azerbaijan's economy and were viewed as a valuable geopolitical asset by competing powers. The ADR government aimed to establish sovereignty over its natural resources while also engaging in trade and cooperation with Western states, particularly Britain, which had a vested interest in securing oil supplies for its global operations.

One of the most critical moments in the ADR's oil policy was the British intervention in Baku in 1918. The British, fearing that Azerbaijan's oil could fall into Bolshevik or Ottoman hands, sent military forces to the region under the command of General Lionel Dunsterville. While the British initially supported anti-Bolshevik factions in Baku, their position remained precarious due to the complex political situation and the advancing Ottoman forces. Eventually, the British were forced to withdraw, leaving Baku vulnerable to Bolshevik control.

Despite efforts to assert economic sovereignty, the ADR was unable to fully capitalize on its oil wealth due to the ongoing conflicts and the broader instability in the region. The struggle for control over Baku's oil industry ultimately contributed to the ADR's downfall, as the Soviet Red Army invaded Azerbaijan in April

1920, bringing an end to the republic and integrating the country into the Soviet system.

The Soviet occupation of Azerbaijan in 1920 marked a fundamental shift in the country's economic structure, particularly in the management of its oil industry. Under the newly established Soviet rule, Azerbaijan's oil sector was nationalized, with all private enterprises being expropriated and brought under state control. This move was in line with the broader Soviet policy of centralizing economic resources to serve the needs of the state. The nationalization of Azerbaijan's oil industry was driven by both economic and strategic considerations. The Bolsheviks recognized that control over Baku's oil was essential for fueling the Soviet economy and supporting industrialization efforts across the USSR. As a result, Azerbaijan became a key supplier of energy resources to the Soviet Union, with its oil production integrated into the centralized economic planning system.

The transition from a privately owned to a state-controlled oil industry was not without challenges. The early years of Soviet rule were marked by logistical difficulties, declining production levels, and shortages of skilled labor. Many of the foreign experts and investors who had previously managed Azerbaijan's oil infrastructure left the country following nationalization, creating a gap in technical expertise. Additionally, the instability caused by war and revolution had severely disrupted oil production, requiring significant efforts to restore and expand capacity.

Prior to the nationalization of its oil sector, Azerbaijan hosted 109 stock companies, of which 72 were supported by Russian capital and 37 by British capital. However, the oil industry faced severe challenges in its

final phase before nationalization, primarily due to the impacts of war and revolution, which led to a marked decline in production levels. On the eve of nationalization, Azerbaijan's oil sector comprised 270 oil-producing enterprises, 49 medium and small firms engaged in well-digging, 25 refining companies, and over 100 mechanical and repair workshops. These figures illustrate the extensive infrastructure supporting the oil industry before its transition to state ownership.

The takeover of Azerbaijan's oil sector by the Bolsheviks in the 1920s marked a significant shift in its management and economic function. Historian Louis Fischer notes that the early Soviet leadership struggled to effectively govern and utilize Baku's vast oil resources. This challenge was so severe that Vladimir Lenin reportedly considered placing "a quarter of Baku up for international auction" to attract foreign investment as a potential solution. Fischer's analysis underscores a fundamental dilemma in the political economy of resource-rich states: while oil wealth offers significant economic opportunities, it also presents risks of mismanagement, corruption, and inefficiency, particularly in newly established states that lack the institutional frameworks necessary for effective resource governance.[41]

During the Soviet period, Azerbaijan's oil industry was integrated into the broader economic and strategic framework of the USSR. The Soviet government sought to centralize control over Azerbaijan's rich energy re-

41 Pinar Batur-VanderLippe and Stephan Simmons, "Oil and Regional Relations in the Caucasus and Central Asia in the Post-Soviet Period", in *Oil in the New World Order*, ed. Kate Gillespie et al. (Florida: University Press of Florida, 1995), 176.

sources, which were vital to the industrial and military needs of the Soviet Union. Oil production in Baku, which had been a globally significant industry in the early 20th century, was repurposed to serve the Soviet economy. Given its strategic importance, the transportation of Azerbaijani oil became a key concern for Soviet planners. Despite these initial setbacks, the Soviet administration prioritized the development of Azerbaijan's oil industry throughout the 1920s and 1930s. Investments were made to modernize production facilities, improve transportation infrastructure, and increase output to meet the growing demands of the Soviet economy. One of the most significant projects undertaken during this period was the construction of the Baku-Batumi crude oil pipeline, which facilitated the transportation of Azerbaijani oil to the Black Sea coast for further distribution.[42] Initially proposed in 1924, the project aimed to facilitate the transfer of Azerbaijani oil to the Socialist Soviet Republic of Georgia (SSRG),[43] as this route provided easier access to other regions of the USSR. The Soviet leadership attempted to negotiate a joint venture with French and American companies to finance and operate the pipeline, particularly with the goal of exporting oil to Europe, notably France. However,

42 Rehman Seferov, "Azerbaycan'da Petrol Üretiminin Tarihsel Süreç İçerisindeki Değişimi". *Türkiyat Araştırmaları Dergisi* 18, (2005): 291.

43 The SSRG was established in 1921 and became part of the Soviet Union in 1922. Initially, it was incorporated within the Transcaucasian Socialist Federative Soviet Republic (TSFSR), which functioned as a union republic within the USSR until 1936. With the implementation of the 1936 Soviet Constitution, the TSFSR was disbanded, and its member republics were granted the status of separate Soviet Union republics. From that date on, the name of Georgia became the Georgian SSR. After the collapse of the USSR, it became an independent republic named Georgian Republic.

these negotiations, which took place in 1925, ultimately proved unsuccessful. Consequently, in 1927, the Soviet Union entrusted the construction and operation of the pipeline to Azneft, an Azerbaijani oil company under state control.

Completed in 1930, the Baku-Batumi pipeline spanned 834 kilometers and served as a critical conduit for transporting crude oil to Batumi, where a refinery processed the petroleum for further distribution. However, the pipeline's operational lifespan was interrupted by the exigencies of World War II. In August 1942, amid concerns that advancing German forces might seize control of the infrastructure, Soviet authorities dismantled the pipeline and repurposed its materials for the construction of the Astrakhan-Saratov pipeline.[44] The legacy of this infrastructure continued beyond the Soviet era. In the 1990s, sections of the original Baku-Batumi pipeline were repurposed in the development of the Baku-Supsa pipeline, which played a significant role in Azerbaijan's post-Soviet energy strategy. This development reflects the enduring strategic importance of Azerbaijan's oil resources and their evolving role in regional and global energy markets.

44 The pipeline used to start in Saratov and run to Moscow in 1946.

Years	Azerbaijan	SSCB
1928	7.7	11.6
1932	12.2	21.4
1935	19.4	25.2
1941	23.5	33
1945	11.5	19.4
1950	14.8	37.9
1955	15.3	70.8
1960	17.8	147.9
1965	21.5	242.9
1970	19.9	353
1975	16.5	490.8
1980	13.2	603.2
1985	13.1	595.3
1990	12.5	571

Oil Production in Azerbaijan and SSCB in 5-Year Periods (Millions of tons)[45]

The increase in energy consumption of the Soviet Union during World War II led to efforts to increase the utilisation of energy resources in Azerbaijan. As seen in table above, in the 1930s and 1940s, Azerbaijan's oil production began to account for a significant share of the Soviet Union's total oil production. During this period, the Soviet government built new oil refineries around Baku in order to manage energy resources efficiently. After World War II, the discovery of new oil fields in the eastern regions of the Soviet Union and the transfer of

45 Иван Калабеков, *СССР и Страны Мира в Цифрах* (Москва: Справочное издание, 2023), 352.; Cumshud Abbasov, *Azərbaycan Respublikasının İqtisadi ve Sosial Coğrafiyası* (Baku: AZTU'nun Matbaası, 2005), 32.

oil equipment and oil experts to the eastern regions of the USSR reduced oil production in Azerbaijan to 11.5 million tonnes.[46]

During the Soviet period, Azerbaijan's oil industry played a crucial role in the USSR's industrial and military strategies. By the 1940s, Baku had become one of the largest oil-producing regions in the world, supplying a substantial portion of the Soviet Union's total energy needs. This strategic importance was particularly evident during World War II, when Azerbaijani oil was vital to the Soviet war effort.

World War II and Baku Oil

During World War II, oil emerged as one of the most strategically vital resources, determining the operational capabilities of both the Allied and Axis powers. Control over major oil-producing regions became a primary objective in military campaigns, as fuel shortages severely restricted the effectiveness of mechanized warfare. Among the most significant oil hubs of the period was Baku, the capital of Azerbaijan, which at the time was a part of the Soviet Union (USSR). The oil fields of Baku were crucial for the Soviet war effort, supplying a significant proportion of the Red Army's fuel requirements.

The immense strategic value of Azerbaijan's oil industry placed it at the center of Nazi Germany's military objectives during the Eastern Front campaigns. Hitler's Case Blue offensive in 1942, which aimed to seize the oil-rich Caucasus region, was motivated by the belief that capturing Baku's oil reserves would ensure German military dominance while depriving the

46 Ibid., 32.

USSR of a vital energy source. However, despite intensive efforts, the German advance was ultimately halted, leading to the eventual failure of Nazi aspirations in the Soviet Union.

At the onset of World War II, Azerbaijan's oil industry was the backbone of the Soviet energy sector, producing vast amounts of crude oil essential for Soviet mechanized divisions, aviation, and naval operations. The first year of the war, 1941, saw Azerbaijan produce 172 million barrels of oil which was a record-breaking figure that underscored its critical role in the war effort. In this year, Azerbaijan sent 23.5 million tons of oil to the front, accounting for 75 % of all oil produced by the Soviet Union.[47] In total, 75 million tons of Baku oil were used for military needs during the Great Patriotic War (1941-1945). 90% of aviation gasoline was supplied to the front by Baku plants.

47 John Wakeman-Linn, Chonira Aturupane, Stephan Danninger, Koba Gvenetadze, Niko Hobdari and Eric Le Borgne, *Managing Oil Wealth: The Case of Azerbaijan*, (Washington, DC: International Monetary Fund, 2004), 8.



Azerbaijan's oil sent to the front

The strategic necessity of maintaining oil production led Soviet authorities to recognize the sacrifices and contributions of Azerbaijani oil workers. In February 1942, the Supreme Soviet of the USSR issued a decree awarding over 500 Azerbaijani oil industry workers with orders and medals of the USSR in recognition of their exceptional service and dedication. These honors reflected the immense efforts made to sustain production under increasingly difficult conditions.

By mid-1942, however, the demands of the front lines significantly depleted Azerbaijan's labor force. Thousands of engineers, oil workers, and industrial specialists were drafted into military service, leaving critical gaps in the workforce. To compensate, the Soviet government undertook an extensive mobilization of women, retirees, and veterans to keep the oil fields operational. By the summer of 1942, more than 25,000

women—constituting 33% of the entire workforce—were working in the oil industry, many of them enduring 18-hour shifts in grueling conditions. In refineries and chemical plants, this percentage was even higher, reaching 38%. By 1944, women made up an astonishing 60% of Azerbaijan's oil industry workforce.

Retired workers and disabled veterans also returned to the fields and refineries, demonstrating the collective effort required to sustain oil production. Despite constant shortages of manpower and materials, Azerbaijan managed to maintain oil output levels that kept Soviet armored divisions, aircraft, and supply lines functional throughout the war.

As Germany's military campaign on the Eastern Front expanded, Hitler and his generals identified securing oil supplies as a key objective. The Wehrmacht[48] relied heavily on petroleum products for its Panzer divisions, Luftwaffe aircraft, and Kriegsmarine naval operations. By 1942, German forces were suffering from fuel shortages due to Allied blockades and insufficient domestic production. In response, Nazi Germany launched Case Blue, a massive offensive aimed at capturing the Soviet Union's southern oil fields, particularly those in Baku, Grozny, and Maykop. Hitler saw these energy reserves as indispensable to the longevity of German military operations and planned to launch a decisive attack on Baku by September 25, 1942.[49]

The German offensive initially achieved significant territorial gains, rapidly advancing across the Don and

48 Nazi Germany's unified armed forces from 1935 to 1945.

49 Chapay Sultanov, *Would the Allies Have Won Without Baku Oil?*, (Baku: Nurlar Publishing), 2008, 143.

Kuban regions, capturing key strategic points such as Rostov-on-Don. The oil fields of Maykop were seized, though they had been sabotaged by retreating Soviet forces, rendering them largely unusable. The ultimate objective, however, remained Baku, which was estimated to be capable of supplying the German war effort with enough fuel to sustain military operations indefinitely. Hitler was so confident in the success of Case Blue that his generals presented him with a decorative cake featuring a map of the Caucasus region. In a symbolic gesture of anticipated victory, the section representing Baku was given to Hitler.[50] However, this confidence proved misplaced, as the German campaign encountered fierce Soviet resistance and logistical difficulties.

50 Lambert M. Surhone, Mariam T. Tennoe and Susan F. Henssonow. *Petroleum Industry in Azerbaijan*, (USA: Betascript Publishing, 2010), 6.



Hitler, cutting the cake featuring a map of the Caucasus region.

The offensive was severely undermined by the Soviet defense of Stalingrad, which became a decisive turning point in the war. By late 1942, the German forces were stretched thin, struggling to maintain supply lines across vast distances. The Battle of Stalingrad, which

resulted in the encirclement and destruction of the 6th Army, forced Hitler to abandon the push toward Baku. As German forces retreated, Soviet troops regained control of key positions in the Caucasus, securing Baku's oil fields from falling into Axis hands.

Azerbaijan's strategic role in World War II extended far beyond its geographical location. As a leading oil-producing region, it became a vital asset to the Soviet war effort, ensuring the supply of fuel necessary for military operations. The extraordinary mobilization of Azerbaijani oil workers, particularly women and retired laborers, was a testament to the resilience and determination of the people in supporting the war effort. Hitler's failed attempt to seize Baku's oil fields highlighted the critical importance of energy security in modern warfare. Despite initial German advances, the stubborn Soviet resistance in the Caucasus and Stalingrad forced the Axis forces into strategic retreat, marking the beginning of the downfall of Nazi Germany.

The events surrounding Azerbaijan's role in World War II underscore the broader significance of energy resources in global conflicts. The oil fields of Baku not only fueled the Red Army's victories but also shaped the strategic calculations of both Allied and Axis powers. Even in peacetime, the legacy of Azerbaijan's wartime oil production continues to influence discussions on energy security, military strategy, and geopolitical competition. The wartime experiences of Azerbaijani oil workers, the heroic efforts of its people, and the failure of Nazi Germany to capture Baku serve as a reminder of how energy resources can define the course of history. Today, Azerbaijan remains a major energy player, and its experiences during World War II offer valuable

lessons on the interplay between natural resources, national security, and global stability.

The USSR's Post-War Baku Oil Policies

The post-World War II period marked a transformative phase in the development of Azerbaijan's oil industry under Soviet rule. From 1945 to 1990, Baku's oil sector underwent significant changes, driven by the Soviet Union's broader economic strategies and energy policies. Baku had been a cornerstone of global oil production in the early 20th century, the latter half of the century saw a gradual shift as the Soviet leadership sought to diversify its energy sources by developing new oil fields in Russia, particularly in Siberia. Nevertheless, Azerbaijan remained a critical player in the Soviet oil industry, contributing to industrial growth, domestic energy production, and oil exports.

Following the conclusion of World War II in 1945, the Soviet Union embarked on a massive reconstruction effort aimed at restoring war-torn industries and revitalizing economic growth. The oil sector was central to this process, as petroleum was crucial to Soviet industrialization, energy security, and military readiness. Azerbaijan, long recognized as a key oil producer within the USSR, was initially expected to play a leading role in post-war recovery efforts. However, the challenges faced by Baku's oil fields became increasingly apparent. By the mid-1940s, many of the easily accessible oil reserves had been depleted due to intensive extraction during the war. As a result, production levels in Baku began to decline, prompting Soviet authorities to shift their focus toward new oil reserves in Siberia and the Volga-Ural region. Despite this shift, Azerbaijan's oil in-

dustry remained integral to Soviet economic planning. In the late 1940s and early 1950s, efforts were made to modernize the existing infrastructure, increase oil recovery rates, and develop offshore oil fields in the Caspian Sea. This period saw the establishment of Azerbaijan's first offshore drilling platforms, laying the foundation for the expansion of the country's offshore oil industry.



"Neft Daşları" on USSR stamp, 1971

One of the most significant developments in Azerbaijan's post-war oil industry was the discovery and development of "Neft Daşları" (Oil Rocks) in 1949. Located approximately 110 kilometers off the coast of Baku, Neft Daşları became the world's first offshore oil field and represented a major technological breakthrough in oil extraction. The construction of offshore platforms and the expansion of deep-water drilling techniques in the Caspian Sea allowed Azerbaijan to maintain its role as a key oil producer within the USSR. The development of Neft Daşları was a complex engineering achievement that required innovative solutions to overcome the challenges of offshore extraction. Soviet authorities invested heavily in infrastructure, constructing a network of drilling rigs, pipelines, and residential complexes for workers. The success of Neft Daşları paved the way for further offshore exploration in the Caspian region, solidifying Azerbaijan's reputation as a pioneer in offshore oil production.



Neft Daşları

The 1960s and 1970s were characterized by rapid industrial expansion across the Soviet Union, and Azerbaijan played a crucial role in refining and process-

ing petroleum products. While crude oil production in Baku was declining due to the depletion of onshore reserves, the Azerbaijani oil industry shifted its focus toward refining and petrochemical production. During this period, several new oil refineries and petrochemical plants were established in Azerbaijan to support the Soviet Union's energy strategy. These facilities processed crude oil into refined products such as gasoline, diesel, and lubricants, which were essential for industrial and military use. Some of the major refineries built or expanded during this period included the Baku Oil Refinery Named After Haydar Aliyev, which became one of the most important oil processing facilities in the Soviet Union, producing a wide range of refined petroleum products for domestic consumption and export. The first unit, the ED-AV-6 unit for primary oil processing, was put into operation in 1976.



Haydar Aliyev Oil Refinery

The Azerneftyag Refinery focused on producing high-quality lubricants and specialized oil derivatives,

while the Sumgait Petrochemical Complex, established in the 1960s, became a major center for petrochemical production, manufacturing synthetic rubber, plastics, and chemical products derived from petroleum.

As the Soviet Union sought to strengthen its oil export capabilities, significant investments were made in oil transportation infrastructure. Azerbaijan played a key role in this process, serving as a major transit hub for oil exports from the Caspian region. One of the most important transportation projects of this period was the expansion of the Baku-Batumi pipeline, originally built in the 1930s but modernized in the 1960s to increase capacity. This pipeline facilitated the transportation of Azerbaijani oil to the Black Sea, where it could be shipped to other Soviet republics and international markets. Additionally, the Soviet Union developed new railway networks and tanker routes to transport oil products from Baku to industrial centers across the USSR. The Caspian Sea also played a crucial role in oil transportation, with tankers carrying crude oil and refined products from Baku to ports in Russia, Iran, and other neighboring regions.

By the 1980s, the Soviet Union had become one of the world's largest oil producers, with energy exports playing a crucial role in the Soviet economy. While Azerbaijan's oil production had declined relative to other Soviet oil fields, the country remained an important center for refining, petrochemical production, and offshore exploration. As oil production in Siberia and the Volga-Ural region increased, Baku's importance as a crude oil supplier diminished. The Soviet government prioritized investments in newer, more productive oil fields, leading to a relative decline in Azerbaijani oil out-

put. However, the country's expertise in offshore drilling continued to be utilized, with new offshore fields being explored in the Caspian Sea.

Throughout the 1980s, Azerbaijan remained a key player in the Soviet Union's energy export strategy. Refined petroleum products from Azerbaijani refineries were shipped to Eastern European countries, as well as Soviet allies in the Middle East, Africa, and Asia. These exports helped sustain the Soviet economy, particularly during periods of economic stagnation and political crisis. Between 1945 and 1990, Azerbaijan's oil industry evolved from being a primary crude oil producer to a major refining and petrochemical center within the Soviet Union. Despite the depletion of onshore oil reserves and the shifting focus toward Siberian oil fields, Azerbaijan maintained its strategic importance through offshore drilling, refinery expansions, and energy exports. The legacy of this period set the stage for Azerbaijan's post-Soviet oil industry, influencing the country's energy policies and international partnerships in the years following independence. The collapse of the Soviet Union in 1991 brought an end to this era, as Azerbaijan regained its independence and embarked on a new path of economic development.

V

AZERBAIJAN'S POST-INDEPENDENCE OIL POLICIES

Azerbaijan's independence from the Soviet Union in 1991 marked the beginning of a transformative period in the country's political and economic landscape. Among the most critical sectors influencing Azerbaijan's trajectory was its oil industry, given the country's substantial hydrocarbon reserves in the Caspian Sea. The oil policies implemented during the early post-Soviet era, under the leadership of Ayaz Mutallibov and Ebulfez Elchibey, were shaped by the geopolitical, economic, and social challenges facing the nascent republic. This period was characterized by instability, conflict, and competing visions for the management and development of Azerbaijan's oil wealth.

The collapse of the Soviet Union left Azerbaijan in a precarious position. The country faced significant political instability, economic disarray, and the outbreak

of the Nagorno-Karabakh conflict with neighboring Armenia. These challenges severely constrained the government's ability to formulate and implement cohesive oil policies. Moreover, Azerbaijan inherited an oil infrastructure that had been integrated into the Soviet centralized system, which was technologically outdated and inefficient. The country lacked both the capital and technical expertise to modernize its oil sector independently, necessitating foreign investment and cooperation.

Ayaz Mutallibov served as the first President of independent Azerbaijan from August 1991 until his resignation in March 1992. His administration's approach to the oil sector was marked by cautious pragmatism, shaped by the complexities of the post-Soviet transition and the ongoing Nagorno-Karabakh conflict. Initially, Mutallibov's government maintained much of the Soviet-era framework for oil management. Given the lack of institutional capacity and the urgent need for stability, there was little immediate overhaul of the oil sector's governance. The State Oil Company of the Azerbaijan Republic (SOCAR) was established in 1992 through the merger of various Soviet-era entities, but this occurred towards the end of Mutallibov's tenure. Prior to this, the oil industry operated under the residual influence of Soviet central planning, with limited autonomy.[51]

Mutallibov's administration was cautious in engaging with Western oil companies. While there was recog-

51 Angelik Spatharou, "Geopolitics of Caspian Oil: the Role of the Integration of the Caspian Region into World Economy in Maintaining Stability in the Caucasus" in *The Politics of Caspian Oil*, ed. Bülent Gökay, (New York: Palgrave Macmillan, 2001), 30-41.

nition of the need for foreign investment to modernize the oil sector, the political instability and the lack of a coherent legal framework deterred significant foreign involvement. Moreover, Mutallibov's government was wary of antagonizing Russia, which still maintained considerable influence in the region. This cautious stance delayed the initiation of major contracts with international oil companies that would later define Azerbaijan's oil strategy under subsequent administrations.

The escalating conflict with Armenia over Nagorno-Karabakh significantly influenced Mutallibov's oil policies. The war diverted attention and resources away from economic development, including the oil sector. Additionally, the conflict undermined Azerbaijan's attractiveness as a stable investment destination, further complicating efforts to secure foreign partnerships in oil exploration and production. Mutallibov's tenure ended amid political turmoil following military setbacks in Nagorno-Karabakh, particularly the Khojaly Massacre in February 1992. His resignation marked the end of a period characterized by political inertia and missed opportunities in the oil sector. However, the groundwork for more assertive oil policies, particularly the establishment of SOCAR, was laid during his administration.

Ebulfez Elchibey, leader of the Azerbaijani Popular Front, assumed the presidency in June 1992, following the resignation of Mutallibov. Elchibey's administration represented a shift towards a more nationalistic and pro-Western orientation, which had significant implications for Azerbaijan's oil policies. However, his tenure was short-lived, ending in June 1993, and was marked by internal instability and continued conflict with Armenia. Elchibey pursued a foreign policy that sought

to distance Azerbaijan from Russian influence and align more closely with Western powers and Turkey. This orientation extended to the oil sector, where Elchibey actively sought to attract Western investment to develop Azerbaijan's offshore oil fields in the Caspian Sea. His administration initiated negotiations with major international oil companies, including BP, Amoco, and Statoil, laying the groundwork for what would later become the "Contract of the Century."

Despite Elchibey's pro-Western stance, his administration faced considerable obstacles in securing foreign investment. The ongoing Nagorno-Karabakh conflict continued to pose a significant risk for potential investors. Moreover, Elchibey's nationalist rhetoric and policies, such as efforts to diminish the role of the Russian language and to promote Azerbaijani identity, alienated Russia, which viewed Azerbaijan's pivot towards the West with suspicion. This strained relationship with Moscow complicated Azerbaijan's regional standing and its ability to navigate the complex geopolitics of Caspian energy resources.

Elchibey's government struggled with institutional weaknesses and economic mismanagement. The lack of a robust legal framework for foreign investment, coupled with rampant corruption and administrative inefficiencies, hindered the effective management of the oil sector. Moreover, the broader economic crisis, characterized by hyperinflation, unemployment, and a collapsing industrial base, limited the government's capacity to implement comprehensive oil policies.

In June 1993, Elchibey was overthrown in a coup led by Suret Huseynov, paving the way for Haydar Aliyev's return to power. Elchibey's brief tenure left a mixed leg-

acy in the oil sector. While he succeeded in initiating critical negotiations with Western oil companies and redefining Azerbaijan's foreign policy orientation, his administration's instability and failure to consolidate state authority limited the realization of these ambitions.[52]

The early post-independence period in Azerbaijan, under the leadership of Ayaz Mutallibov and Ebulfez Elchibey, was marked by political instability, conflict, and competing visions for the management of the country's oil resources. Mutallibov's cautious approach reflected a desire to maintain stability amid the chaotic dissolution of the Soviet Union, while Elchibey's pro-Western, nationalist orientation sought to leverage Azerbaijan's oil wealth to assert independence from Russian influence. However, both administrations were constrained by the broader context of the Nagorno-Karabakh conflict, economic collapse, and institutional fragility. It was only with the accession of Haydar Aliyev to power in 1993 that Azerbaijan's oil policies began to stabilize, culminating in the signing of the "Contract of the Century" in 1994, which fundamentally reshaped the country's economic and geopolitical trajectory. The foundational experiences of the Mutallibov and Elchibey periods, however, were instrumental in setting the stage for these later developments.[53]

52 Avedis Bedros Hadjian, "Azerbaijan's Energy Policy and its Implication for Russsian Security" in *The Politics of Caspian Oil*, ed. Bülent Gökay, (New York: Palgrave Macmillan, 2001), 119-125.

53 Rana Hajiyeva, *Azerbaycan Petrol Endüstrisi ve Gelişim Aşamaları*. Master Thesis, (İstanbul: İstanbul University, Social Sciences Institute, 2020), 40.

Contract of The Century

Following the dissolution of the Soviet Union in 1991, Azerbaijan emerged as an independent nation and embarked on a transformative journey to establish its own energy policy. This period marked a critical juncture in the country's history, as it sought to transition from a centrally planned economy to a market-oriented system, with the energy sector playing a pivotal role in this transformation. Azerbaijan's post-independence oil policies were characterized by a series of strategic reforms, international collaborations, and landmark agreements aimed at integrating its energy sector into global markets, attracting foreign investment, and ensuring sustainable economic growth. [54].

In the immediate aftermath of independence, Azerbaijan faced significant economic and political challenges. The collapse of the Soviet Union disrupted existing trade networks, industrial production, and energy infrastructure, leaving the country in a precarious economic position. The energy sector, which had been a cornerstone of the Soviet economy, was in dire need of modernization and investment. Recognizing the strategic importance of oil and gas resources, the Azerbaijani government prioritized the restructuring of its energy sector as a means of driving economic recovery and securing its position in the global energy market.

One of the first steps taken by the government was to liberalize the energy sector and create a regulatory framework conducive to foreign investment. This in-

54 Rovshan İbrahimov, "Energy and Power Politics in the Cases of Azerbaijan and Turkmenistan". *Perceptions: Journal of International Affairs*, 22/2 (2017): 136.

volved the establishment of the State Oil Company of the Azerbaijani Republic (SOCAR) in 1992, which was tasked with managing the country's oil and gas resources and overseeing the development of its energy infrastructure. SOCAR played a central role in negotiating international agreements and attracting foreign investors, laying the groundwork for Azerbaijan's future energy policies.

A defining moment in Azerbaijan's post-independence energy strategy came in 1994 with the signing of the "Contract of the Century." This landmark agreement, formally known as the Production Sharing Agreement (PSA) for the Azeri-Chirag-Guneshli (ACG) oil fields,[55] marked the beginning of a new era in Azerbaijan's oil industry.[56] The contract was signed between SOCAR and a consortium of international oil companies, including BP, Amoco, Unocal, and Statoil, among others. BP and SOCAR held the largest shares in the consortium, reflecting their central roles in the project. [57]

55 Azeri–Chirag–Gunashli (ACG), or Azeri–Chirag–Deepwater Gunashli is a complex of oil fields in the Caspian Sea which is about 120 kilometres off the coast of Azerbaijan.

56 Matthias Luecke and Natalia Trofimenko, "Whither Oil Money?: Redistribution of Oil Revenue in Azerbaijan", *The Economics and Politics of Oil in the Caspian Basin*, ed. Boris Najman et al, (New York: Routladge, 2008),113.

57 Nasib Nassibli, "Azerbaijan: Oil and Politics in the Country's Future", in *Oil and Geopolitics in the Caspian Sea Region*, ed. Michael P. Corissant et al. (Westport, Connecticut: Praeger, 1999), 107.



The Azeri-Chirag-Deepwater Gunashli fields

Unlike Abulfaz Elchibey, who pursued a strongly pro-Western and pan-Turkist foreign policy that distanced Azerbaijan from Russia and other regional powers, Haydar Aliyev adopted a balance policy during the negotiations of the "Contract of the Century" in 1994. Aliyev understood the geopolitical significance of Azerbaijan's oil reserves and carefully engaged multiple global Powers namely; China, Russia, the United Kingdom, the United States, and Turkey, to ensure that no single country dominated Azerbaijan's energy sector. By including Western oil companies while maintaining ties with Russia and China, Aliyev prevented geopolitical isolation and ensured Azerbaijan's sovereignty over its natural resources, securing both political and economic stability.

Aliyev's balanced approach allowed Azerbaijan to strengthen economic ties with Turkey as a key regional ally, while also reassuring Russia that its historical influence would not be completely eroded. By incorporating British and American oil giants into the deal, he

secured Western investments and technological expertise, integrating Azerbaijan into the global energy market. Meanwhile, China's growing energy demands presented future opportunities for diversification. Unlike Elchibey's firm stance toward Russia, Aliyev's pragmatic diplomacy mitigated external pressures and established Azerbaijan as a stable, independent energy hub, laying the foundation for long-term economic growth and geopolitical resilience.



The signing ceremony of the Contract of the Century

The Contract of the Century was hailed as a groundbreaking achievement for Azerbaijan, as it signaled the country's commitment to integrating its energy sector into the global market. The agreement provided for the exploration, development, and production of oil from the ACG fields, which were estimated to hold significant reserves. The signing of the contract not only attracted substantial foreign investment but also established Azerbaijan as a key player in the Caspian region's

energy landscape. The successful implementation of the Contract of the Century had far-reaching implications for Azerbaijan's economy. The influx of foreign capital and expertise enabled the modernization of the country's oil infrastructure, including the construction of the Baku-Tbilisi-Ceyhan (BTC) pipeline, which became a critical artery for transporting Azerbaijani oil to international markets. The revenues generated from oil exports played a crucial role in stabilizing the economy, reducing poverty, and funding infrastructure projects.

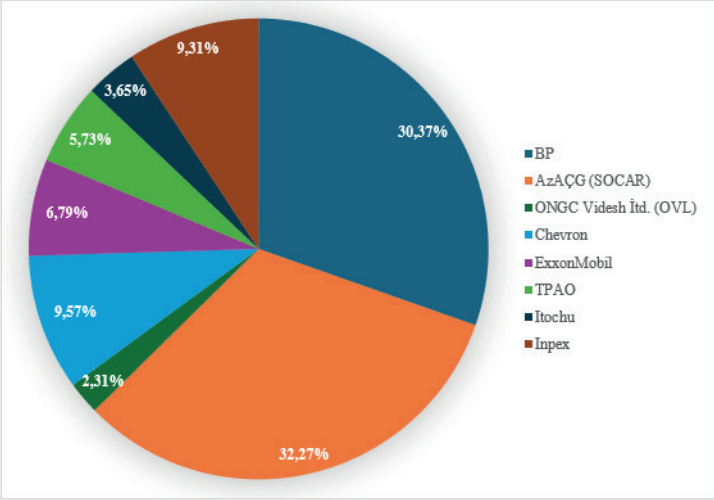
Building on the success of the Contract of the Century, Azerbaijan soon turned its attention to the development of its natural gas resources. In 1996, the government signed an agreement for the exploration and production of the Shah Deniz gas field, one of the largest gas fields in the Caspian region. The Shah Deniz field, with estimated reserves of 1.1 trillion cubic meters of natural gas and 240 million tonnes of gas condensate, represented a significant opportunity for Azerbaijan to diversify its energy exports and strengthen its position in the global gas market.[58]

The Shah Deniz project was developed by a consortium of international companies, including BP, SOCAR, and Statoil, among others. The first phase of the project, which began production in 2006, involved the construction of offshore platforms, pipelines, and processing facilities. The gas produced from Shah Deniz was transported via the South Caucasus Pipeline (SCP) to Georgia and Turkey, where it was supplied to domestic markets and exported to Europe.

58 Abbasova, N. (2016). "BP: Shah Deniz 2 project 82 pct complete". AZERNEWS. https://www.azernews.az/oil_and_gas/102652.html.

The second phase of the Shah Deniz project, known as Shah Deniz 2, was launched in 2018 and represented a major milestone in Azerbaijan's energy strategy. The project involved the expansion of production capacity and the construction of the Trans-Anatolian Natural Gas Pipeline (TANAP) and the Trans-Adriatic Pipeline (TAP), which together formed the Southern Gas Corridor. This corridor enabled the transportation of Azerbaijani gas to European markets, reducing Europe's dependence on Russian gas and enhancing Azerbaijan's role as a reliable energy supplier.

In 2017, Azerbaijan signed another landmark agreement, known as the "New Contract of the Century," which extended the development of the ACG oil fields until 2050. The agreement, signed in Baku with the participation of President Ilham Aliyev, marked a new phase in the country's energy strategy. Under the terms of the new contract, SOCAR's share in the ACG project was increased from 11.65% to 25%, reflecting the government's commitment to maximizing the benefits of its oil resources for the national economy. The New Contract of the Century also underscored Azerbaijan's efforts to adapt to changing global energy dynamics. With the rise of renewable energy and the global transition towards a low-carbon economy, Azerbaijan sought to optimize the development of its hydrocarbon resources while exploring opportunities for diversification. The agreement included provisions for the application of advanced technologies and best practices to enhance production efficiency and minimize environmental impact.



Percentage of the Shareholders in New Century Agreement [59]



"Contract of the Century" 30th anniversary stamp, 2024

In recent years, Azerbaijan has continued to strengthen its position in the global energy market through strategic acquisitions and partnerships. On December 22, 2023, SOCAR acquired a 7.27% stake in the ACG project from Equinor, increasing its share to 32.27%. This acquisition demonstrated SOCAR's growing capabilities and its commitment to playing a leading role in the development of the country's energy resources. The increased share in the ACG project not only enhanced SOCAR's influence over the project but also provided additional revenues for the

59 SOCAR, 2024.

Azerbaijani government. These revenues have been instrumental in funding social and economic development programs, including investments in education, healthcare, and infrastructure.

Deal of the Century has been one of the cornerstones of Azerbaijan's economic development. Revenues generated through the energy sector have not only supported economic growth, but have also been used for infrastructure projects, social development and strengthening national security. At the same time, this process has also helped Azerbaijan to position itself as a political and economic power in the international arena.

Oil Pipelines

Energy pipelines are indispensable components of a nation's energy policy and play a pivotal role in shaping international relations. As conduits for the transportation of oil and natural gas, pipelines are not merely infrastructure projects; they are strategic assets that influence economic development, geopolitical dynamics, and energy security. This is particularly evident in resource-rich regions such as Azerbaijan and the broader Caspian Basin, where the development of pipelines has become a cornerstone of national strategy. Azerbaijan, with its vast hydrocarbon reserves in the Caspian Sea, has emerged as a key player in the global energy market by constructing a network of pipelines to transport its oil and gas to Europe and other international markets. These projects have not only fueled economic growth but have also redefined the security and geopolitical landscape of the region.



Pipelines

Moreover, pipelines provide a reliable and stable means of energy transportation, which is crucial for ensuring energy security. Unlike other modes of transportation, such as rail or tanker ships, pipelines offer a continuous flow of energy resources, reducing the risk of supply disruptions. This reliability is particularly important for importing countries, which depend on a steady supply of energy to sustain their economies. For Azerbaijan, pipelines have become a tool for enhancing its reputation as a reliable energy supplier, thereby strengthening its position in international energy markets.

The continuous rise in oil production necessitated the exploration of more cost-effective transportation methods. One such solution was the development of pipelines. By this time, oil was already being transported by rail to the Black Sea port of Batumi, making the construction of a pipeline along this route a viable option.

In Absheron, the idea of using pipelines for oil transport was first proposed by the renowned Russian scientist Dmitri Mendeleev in 1863. Mendeleev advocated for the construction of dedicated pipelines to transport oil from wells to refineries and from refineries to shipping ports.

By the late 19th century, railways accounted for approximately 20% of oil and petroleum product transportation. However, industrialists sought a more cost-effective, efficient, reliable, and faster means of transport. Despite the evident practical advantages of oil pipelines, manufacturers hesitated to adopt this method due to concerns over monopolization. Additionally, the government opposed such proposals until mid-1886. In November of that year, a consortium of Baku oil entrepreneurs, including prominent figures such as Zeynalabdin Taghiyev and Musa Naghiyev, petitioned the Ministry of State Property for permission to construct the Trans-Caucasian pipeline. Proponents argued that while the pipeline might create a monopoly in oil transportation, its strategic and economic benefits were undeniable. However, a debate arose over whether the pipeline should transport crude oil or refined petroleum products, such as kerosene. Owners of major refineries opposed the transportation of crude oil to Batumi, fearing it would lead to the establishment of competing refining centers in the region. Ultimately, a consensus was reached to construct a pipeline dedicated to transporting refined petroleum products, or "white oil," from Baku to Batumi.

Among the most vocal advocates for the Baku-Batumi kerosene pipeline were the Rothschild brothers, Alfons and Edmond, who played a pivotal role in financing the

project. The South Caucasus Railway Administration oversaw its construction and operation. Work on the pipeline commenced in 1897, proceeding concurrently with the expansion of the Transcaucasian Railway, and spanned a decade. At the time, it was the largest pipeline project globally. The pipeline proved instrumental in competing with the American oil industry, reducing the cost of transporting kerosene by up to fourfold. It also generated over 3 million rubles in annual net revenue for the Russian treasury. The foresight of Dmitri Mendeleev, who had championed the pipeline concept, was vindicated as the project significantly influenced Russia's oil policy. The successful completion of the pipeline represented a triumph for its proponents, including Mendeleev, Taghiyev, and the Rothschild brothers. This innovation demonstrated the efficiency of pipeline transport, as the cost of moving one pood[60] of oil via pipeline was just two kopek[61], compared to four kopeks by train.[62] This marked a significant milestone in the evolution of oil transportation, highlighting the economic and logistical advantages of pipelines over traditional methods. The construction costs were recouped within five years, and by 1912, the pipeline had become a profitable venture. During the period of 1918–1920, the Baku-Batumi pipeline served as a critical export route for Azerbaijani oil. To ensure its uninterrupted operation, representatives from Azerbaijan, Georgia, and the Ottoman Empire signed an agreement in Batumi on June 24, 1918. The agreement stipulated that each party would maintain the pipeline within its

60 Pood was a unit of mass used in Russia equal to 16.38 kilograms.

61 Kopek was the currency unit of Russia. It is still the currency unit of Russia.

62 Van Der Leeuw, *Oil and Gas in the Caucasus,* 87.

territory and share revenues proportionally based on the pipeline's length in their respective regions. Following the Red Army's occupation of Azerbaijan in 1920, the pipeline's operations were temporarily halted, only to resume in the early 1920s. Kerosene transport recommenced in March 1921, with the first shipment reaching Batumi on May 20, 1921.

In 1925, the USSR State Planning Committee decided to repurpose the kerosene pipeline for crude oil transportation, with the oil to be processed at the Batumi Oil Refinery. Plans were made to transport 10 million poodsof oil and petroleum products annually through a new 254 mm pipeline, while the renovated original pipeline would handle 50 million poods. The completion of the Baku-Batumi pipeline and the establishment of refineries in Batumi enabled the Soviet Union to achieve dominance in the global oil market within just 23 months. During World War II, particularly the Great Patriotic War, the pipeline fell into disuse due to the threat of German advances, and a portion of it on Georgian territory was dismantled. The commissioning of the 500 mm Samgori-Batumi pipeline in 1980 rendered the Baku-Batumi pipeline obsolete, and its repair was deemed economically unviable. However, the section of the pipeline within the Azerbaijan SSR, specifically the Baku-Boyuk Kesik segment, was preserved by Soviet authorities. On July 10, 1986, the USSR Ministry of Oil Industry's Glavtransneft Department ordered the complete dismantling of the Baku-Batumi pipeline, including its primary and auxiliary facilities. Despite its decommissioning, parts of the pipeline were repurposed during the construction of the Baku-Supsa pipeline in

the 1990s. It is arguable that the Baku-Supsa[63] pipeline, which plays a crucial role in exporting Azerbaijani oil to Western markets, represents the modern successor to the historic Baku-Batumi pipeline.



Azerbaijan's Oil Pipelines

In this context, it is possible to mention the Baku-Supsa Pipeline, which Azerbaijan has realized and operated in the post-independence period, as well as the Baku-Novorossiysk Pipeline and Baku-Tbilisi-Ceyhan Pipeline (BTC).

Baku-Novorossiysk Pipeline

The Baku-Novorossiysk oil pipeline, also referred to as the Northern Route Export Pipeline or Northern Early Oil Pipeline, represents a critical energy corridor facilitating the transportation of Azerbaijani crude oil to international markets. Spanning 1,330 kilometers, the pipeline originates from the Sangachal Terminal, locat-

63 Emmanuel Karagiannis, *Energy and Security in the Caucasus*, (New York: Routledge Curzon, 2002), 28.

ed near Baku, and extends to the Novorossiysk terminal on Russia's Black Sea coast.[64] In Russia, the pipeline traverses Dagestan, while 231 kilometers of its length is situated within Azerbaijani territory. The Azerbaijani segment is managed by SOCAR, whereas the Russian section is under the management of Transneft.



Baku-Novorossiysk Pipeline

The origins of the Baku-Novorossiysk pipeline trace back to the Soviet era, during which it was constructed primarily to transport Russian crude to refineries in Baku. However, following the dissolution of the USSR, the pipeline fell into disuse. With the signing of the "Contract of the Century" in 1994, aimed at unlocking Azerbaijan's rich oil reserves for global markets, the strategic restoration and reversal of this pipeline's flow became a priority. The decision to rehabilitate and repurpose the pipeline for south-north oil transportation was

64 Azerbaijan, "The Main Transport Routes Of Energy Resources" Azerbaijan.az https://azerbaijan.az/en/related-information/133

formally made on October 9, 1995, initiating negotiations between Azerbaijan and Russia. These discussions culminated in an agreement signed on January 18, 1996, in Moscow by Azerbaijani President Haydar Aliyev and Russian Prime Minister Viktor Chernomyrdin, enabling Azerbaijani crude to be transported via Russian territory to Novorossiysk.

The pipeline's maximum capacity was expanded to 105,000 barrels per day (approximately 5 million tons annually), with a potential increase to 17 million tons per year. The infrastructure improvements entailed an investment of $60 million, while the Sangachal Terminal, serving as the pipeline's starting point, was developed at a cost of $72 million. The terminal features a storage capacity of 100,000 tons (730,000 barrels), consisting of four reservoirs, each with a capacity of 25,000 tons. The Novorossiysk terminal, at the pipeline's terminus, possesses the capability to transport up to 34 million tons of oil and petroleum products annually.

On February 16, 1996, an official signing ceremony in Baku finalized the technical and economic agreements necessary for the pipeline's operation. These agreements encompassed transport assistance commitments and regulations governing the transit of Azerbaijani crude through Russian territory. Subsequently, on October 25, 1997, oil transportation officially commenced, marking a significant milestone in Azerbaijan's post-Soviet energy strategy[65].

Despite the technical advancements and diplomatic agreements, the operationalization of the pipeline, pass-

65 Karagiannis, *Energy and Security in the Caucasus*, 27.

ing through Chechnya,[66] encountered delays and challenges. By February 1997, Azerbaijan had completed its segment of the pipeline, yet transportation was postponed due to bureaucratic and logistical impediments within Russia, specifically attributed to Transneft's inability to fulfill contractual obligations. During a trilateral agreement signing ceremony involving Azerbaijan, Russia, and Chechnya on July 11, 1997, President Haydar Aliyev emphasized the urgency of oil exports, stating, "We should have started exporting our own oil long ago." At this juncture, Aliyev also issued a strategic warning, declaring that Azerbaijan possessed alternative routes for oil transportation, notably via Georgia (to the Supsa port) and Türkiye (to the Ceyhan port).

Recognizing the geopolitical and economic significance of securing reliable oil export routes, Aliyev issued a presidential decree on September 5, 1997, establishing a working group to oversee the finalization of the project. By October 1997, oil exports through the Baku-Novorossiysk pipeline were formally initiated, ensuring Azerbaijan's access to global markets via the Russian Black Sea port. Between October 1997 and January 1999, the pipeline facilitated the export of 1.5 million tons of Azerbaijani crude. In 2021, SOCAR and Transneft formalized an agreement for the continued transportation of 1 million tons of Azerbaijani oil via this route. In the same year, between January and November, approximately 1.009 million tons of oil were transported through the Baku-Novorossiysk pipeline which remains a vital component of Azerbaijan's energy infrastructure, playing a crucial role in oil exports

66 This part of the pipeline was moved to Dagestan due to the war and unstability in Chechnian lands.

and geopolitical strategy. Today, the pipeline continues to function as an important transit corridor, contributing to the stability and efficiency of the Caspian energy supply chain.

In parallel to the Baku-Novorossiysk pipeline, Baku-Supsa Pipeline was commissioned in 1998, further diversifying Azerbaijan's oil transportation network. Over subsequent decades, it continued to serve as an alternative export route, complementing other strategic pipelines such as Baku-Supsa and Baku-Tbilisi-Ceyhan (BTC).

Baku-Supsa Pipeline

The Baku-Supsa oil pipeline, also known as the Western Route Export Pipeline (WREP), was developed as a part of Azerbaijan's broader strategy to establish multiple oil export routes following the signing of the "Contract of the Century" on September 20, 1994. This agreement, signed at the Gulustan Palace in Baku, facilitated the joint development of the Azeri-Chirag-Gunashli (ACG) oil fields[67] in the Azerbaijani sector of the Caspian Sea and outlined the construction of key oil transportation infrastructure, including the Baku-Supsa pipeline. The pipeline, designed to transport Azerbaijani crude oil through Georgia to global markets, was formalized through an intergovernmental agreement signed in Tbilisi on March 6, 1996.

67 İlham Şaban, "*Azəri-Çıraq-Günəşli" "Əsrin müqaviləsi", 1994-2022: Faktlar, Sənədlər və Rəqəmlər Toplusu*, (Baku: TEAS Press, 2023), 1-4.



Baku-Supsa Pipeline

The 833-kilometer-long pipeline, starting from the Sangachal Terminal near Baku and terminating at the Supsa terminal on Georgia's Black Sea coast, was designed to have an annual throughput capacity of 5.1 million tons, equating to a daily capacity of 115,000 barrels. The total cost of the pipeline was $565 million. To support its full operation, four crude oil storage terminals were constructed in Supsa, each with a 250,000-barrel capacity. Crude oil exported via this route have been shipped to European markets through the Bosphorus Strait.

A crucial development in the project's realization was the Azerbaijan International Operating Company's (AIOC) decision in October 1995 to pursue two distinct export routes for Azerbaijani oil: one through Russia (Baku-Novorossiysk) and the other through Georgia (Baku-Supsa). This led to intensified pipeline construction efforts and parallel negotiations with both Moscow and Tbilisi. Shortly after finalizing transit agreements with Russia, Azerbaijan signed an intergovernmental

agreement with Georgia on March 8, 1996, expediting the technical and economic assessment of the Baku-Supsa pipeline route.

Of the 926-kilometer connection between Sangachal and Supsa, 788 kilometers of existing infrastructure was deemed usable, while the remaining 138 kilometers required new pipeline construction. The project also included the installation of six pumping stations and a registration system for monitoring oil exports.

On October 10, 1996, at a meeting reviewing AIOC's two-year operations, the consortium of foreign oil companies announced that the Western Route Export Pipeline (WREP) was expected to be operational by the first quarter of 1997. The tender for the pipeline's construction, announced by AIOC in December 1996, attracted companies from the United States, Italy, Australia, Turkey, France, the United Kingdom, and Azerbaijan. After evaluating the submitted proposals, AIOC awarded the contract in April 1997, with the Azerbaijani-Turkish joint venture "Tekfen-Azfen" overseeing construction in Azerbaijan and Australia's McConnell Dowell Middle East managing operations in Georgia.

The project required the rehabilitation of 421 kilometers of existing pipeline in Azerbaijan and the construction of a new 47-kilometer segment, while in Georgia, 340 kilometers of existing pipeline needed restoration, alongside 39 kilometers of new pipeline construction. The budget allocated for the Baku-Supsa pipeline totaled $315 million, of which $150 million was allocated for 1997, with the remainder distributed over 1998 until project completion.

Despite a well-structured timeline, the start of

construction was delayed, prompting an accelerated work schedule. One of the driving factors behind the urgency was the unanticipated complications in the Northern Route (Baku-Novorossiysk pipeline). Although Azerbaijani oil began flowing into the Baku-Novorossiysk pipeline in December 1996, logistical issues on the Russian side caused bottlenecks, preventing oil from reaching the Black Sea until October 25, 1997. This underscored the necessity of expediting the construction of the Baku-Supsa pipeline, as both Azerbaijan and international investors sought a reliable and efficient oil export route.

Initially, pipeline construction proceeded according to the established schedule. However, early 1998 testing of the existing sections revealed structural deficiencies in the previously laid pipes, which failed to withstand the required pressure levels. Consequently, in March 1998, AIOC representatives announced that construction would not be completed within the original timeline, necessitating the replacement of inadequate pipeline segments.

During its operational peak, the Baku-Supsa pipeline symbolized the height of cooperation between Azerbaijan and Georgia. However, its significance in Azerbaijan's oil export strategy has diminished considerably in recent years, primarily due to the commissioning of the Baku-Tbilisi-Ceyhan (BTC) pipeline in 2005. The BTC pipeline, offering a more efficient and direct route to global markets, has largely overshadowed the Baku-Supsa route.

In May 2022, the Baku-Supsa pipeline was temporarily suspended due to the Russia-Ukraine war, having previously transported approximately 3 million bar-

rels of oil per month to the BTC pipeline.[68] However, in February 2023, the pipeline was briefly reactivated following a six-day closure of the BTC pipeline's export terminal in Ceyhan, Turkey. This interruption was caused by the devastating earthquake that struck Turkey on February 6, 2023. During this period, oil extracted from the Azeri-Chirag-Guneshli (ACG) field block in the Caspian Sea was redirected through the Baku-Supsa pipeline, and several tankers loaded with Azerbaijani oil were dispatched to global markets from the Supsa port.

This temporary resurgence highlighted the Baku-Supsa pipeline's role as a secondary export route, capable of providing flexibility during disruptions to primary infrastructure. Nonetheless, its long-term importance has been eclipsed by the BTC pipeline, which remains the cornerstone of Azerbaijan's oil export strategy.

The Baku-Supsa pipeline played a pivotal role in diversifying Azerbaijan's oil export routes, reducing reliance on Russian transit corridors and strengthening energy security. While the project faced technical and logistical hurdles, its completion significantly bolstered Azerbaijan's position as a key energy supplier to European markets. The challenges encountered during the construction and commissioning of the pipeline highlighted the complexities of revitalizing Soviet-era infrastructure and underscored the importance of robust project assessment and execution strategies in large-scale energy initiatives.

Despite initial setbacks, the Baku-Supsa pipeline

68 David O'Byrne, "Ukraine war forces closure of Azerbaijani oil export pipeline", eurasianet, 2022. https://eurasianet.org/ukraine-war-forces-closure-of-azerbaijani-oil-export-pipeline

emerged as a crucial component of Azerbaijan's energy export framework, complementing other major routes such as the Baku-Novorossiysk pipeline and, later, the Baku-Tbilisi-Ceyhan (BTC) pipeline. Its successful implementation reinforced Azerbaijan's role as a regional energy hub, ensuring greater market access and increased foreign investment in the country's hydrocarbon sector.

Baku-Tbilisi-Ceyhan Pipeline (BTC)

The Baku-Tbilisi-Ceyhan (BTC) pipeline stands as one of the most significant energy infrastructure projects in the Caspian region and beyond. Spanning a total length of 1,768 kilometres, this crude oil pipeline serves as a critical conduit for transporting hydrocarbons from the Caspian Sea to the Mediterranean, thereby linking the resource-rich regions of Azerbaijan to global energy markets. The pipeline originates at the Azeri-Chirag-Gunashli (ACG) oil field, located offshore in the Caspian Sea, and terminates at the port of Ceyhan on Turkey's Mediterranean coast. Its route traverses three countries: Azerbaijan, Georgia, and Turkey, with 443 kilometres of the pipeline located in Azerbaijan, 249 kilometres in Georgia, and 1,076 kilometres in Turkey. The BTC pipeline is not merely a physical infrastructure project; it is a strategic asset that has profound economic, geopolitical, and energy security implications for the region and its stakeholders.[69]

69 Svante E. Cornell and Fariz Ismailzade, "The Baku-Tbilisi-Ceyhan Pipeline: Implications for Azerbaijan" in *The Baku-Tbilisi-Ceyhan Pipeline: Oil Window to the West,* ed. S. Frederick Starr et al. (Sweden: Central-Asia Caucasus Institute & Silk Road Studies Program, 2005), 61-64. : SOCAR, (2024).



Baku-Tbilisi-Ceyhan Pipeline

The origins of the BTC pipeline can be traced back to the early 1990s, following the dissolution of the Soviet Union. The newly independent Republic of Azerbaijan, endowed with substantial hydrocarbon reserves in the Caspian Sea, sought to leverage its natural resources to foster economic growth and strengthen its geopolitical position. However, the landlocked nature of the Caspian region posed significant challenges for exporting oil to international markets. Prior to the BTC pipeline, Azerbaijan relied heavily on Soviet-era infrastructure, which directed oil exports through Russia. This dependence on a single transit route was seen as a strategic vulnerability, prompting Azerbaijan to explore alternative export corridors.

The first formal agreement for the construction of the BTC pipeline was signed on 9 March 1993, between Azerbaijan and Turkey, in Ankara. This agreement marked the beginning of a long and complex process of negotiations, feasibility studies, and international collaboration. The project gained momentum in the

late 1990s, as global energy demand began to rise and the strategic importance of diversifying energy supply routes became increasingly apparent. The involvement of major international energy companies and financial institutions further bolstered the project's viability. Construction of the pipeline officially commenced in April 2003, and after two years of intensive work, it was completed in 2005. The first shipment of oil reached Ceyhan on 28 May 2006, marking a historic milestone for the region.

The BTC pipeline is a state-of-the-art engineering marvel designed to transport crude oil efficiently and safely across diverse terrains, including mountainous regions, rivers, and seismic zones. Its daily capacity of 1 million barrels of oil makes it one of the most significant pipelines in the former Soviet Union, second only to the Druzhba pipeline in terms of length and capacity. The pipeline's route was carefully planned to minimise environmental impact and avoid ecologically sensitive areas, reflecting a commitment to sustainable development.

The ownership and management of the pipeline are overseen by BTC Co., a collaborative entity comprising 11 energy corporations. Within this consortium, BP assumes the role of the principal managing partner, responsible for coordinating operations and ensuring the efficient functioning of the pipeline system. The consortium includes major players such as SOCAR, Chevron, Equinor, and TotalEnergies, among others. This multinational collaboration underscores the global significance of the BTC pipeline and the shared interest in ensuring its success. The consortium's governance structure ensures that operational decisions are made

in a transparent and collaborative manner, with a focus on maintaining the highest standards of safety and environmental stewardship.



SOFAZ Tower, Baku

The construction and operation of the BTC pipeline have had a transformative impact on the economies of the host countries. For Azerbaijan, the pipeline has been a cornerstone of its post-independence economic strategy, providing a reliable export route for its oil and generating substantial revenue. The influx of foreign investment associated with the project has also stimulated economic growth, created jobs, and fostered the development of ancillary industries. In Georgia, the pipeline has enhanced the country's strategic importance as a transit hub, attracting further investment in infrastructure and energy projects. Turkey, as the pipeline's terminus, has benefited from increased economic activity in Ceyhan, which has emerged as a key energy hub in the Mediterranean region. For Azerbaijan, the BTC pipeline

has played a crucial role in economic diversification and fiscal revenue generation, strengthening its sovereign wealth fund called "State Oil Fund of the Republic of Azerbaijan-SOFAZ. This fund, established in 1999 as an extrabudgetary entity, is tasked with the professional management of revenues derived from the country's oil and gas resources to benefit both current and future generations through strategic savings. SOFAZ receives all state revenues from post-Soviet oil and gas production fields, and its operations are not influenced by fluctuations in oil prices or the government's fiscal position, as it lacks an immediate stabilization mandate. To mitigate political pressure for rapid spending of oil windfalls, SOFAZ was placed under the direct oversight of the President of Azerbaijan, who appoints the members of its supervisory board.[70]

The pipeline has also enhanced Georgia's geopolitical significance, as transit fees contribute to its national budget while reinforcing its strategic partnership with the West. For Turkey, the BTC pipeline has strengthened its position as an energy hub, supporting its broader ambitions in regional energy geopolitics. Beyond the immediate economic benefits, the BTC pipeline has also contributed to regional integration and cooperation. The project has necessitated close collaboration between Azerbaijan, Georgia, and Turkey, fostering diplomatic ties and creating a framework for future joint initiatives. This spirit of cooperation has extended to other sectors, including trade, transportation, and energy, thereby contributing to the overall stability and prosperity of the region. The BTC pipeline is not merely an economic asset; it is also a geopolitical tool that has reshaped the

70 John Wakeman-Linn, et al. *Managing Oil Wealth*, 11.

dynamics of the Caspian region and beyond. By providing an alternative export route for Caspian oil, the pipeline has reduced the region's dependence on Russian transit infrastructure, thereby enhancing its energy independence. This diversification of export routes has also strengthened the bargaining power of Azerbaijan and other Caspian states in their dealings with international energy markets.

The pipeline's strategic importance extends to its role in enhancing energy security for Europe. As global energy demand continues to rise, Europe has sought to reduce its reliance on Russian oil and gas by diversifying its supply sources. The BTC pipeline plays a crucial role in this strategy by providing a direct link between the Caspian region and European markets. This has not only enhanced Europe's energy security but also strengthened its political and economic ties with the Caspian states.

The security of the BTC pipeline is of paramount importance, given its strategic significance and the potential risks associated with its operation. The pipeline traverses diverse and often challenging terrains, making it vulnerable to a range of threats, including natural disasters, terrorist attacks, and political instability. To mitigate these risks, the consortium has implemented a comprehensive security framework that includes advanced monitoring systems, regular maintenance, and close coordination with local authorities. Natural disasters, such as earthquakes and landslides, pose a significant risk to the pipeline, particularly in the mountainous regions of Georgia and Turkey. To address this, the pipeline has been designed with robust engineering features, including flexible joints and reinforced mate-

rials, to withstand seismic activity. Additionally, the consortium has established emergency response teams and contingency plans to ensure rapid recovery in the event of a disruption. Terrorism and sabotage are also major concerns, given the pipeline's strategic importance and the volatile security environment in some parts of the region. The consortium has invested heavily in physical security measures, including surveillance systems, patrols, and barriers, to deter potential attacks. Furthermore, the pipeline's route has been carefully planned to avoid conflict zones and areas with a high risk of political instability.

Political risks, including changes in government policies and regulatory frameworks, also pose a challenge to the pipeline's operation. To address this, the consortium has engaged in ongoing dialogue with the host governments and other stakeholders to ensure a stable and predictable operating environment. This includes negotiating long-term agreements that provide legal and financial certainty for the project.

The BTC pipeline has been designed and operated with a strong commitment to environmental sustainability and social responsibility. The consortium has implemented a range of measures to minimise the pipeline's environmental impact, including the use of advanced technologies to detect and prevent leaks, and the restoration of affected areas to their natural state. Environmental impact assessments were conducted prior to construction, and the pipeline's route was carefully planned to avoid ecologically sensitive areas.

In addition to environmental considerations, the consortium has also prioritised social responsibility, particularly in relation to the communities living along

the pipeline's route. This includes providing compensation for land acquisition, creating job opportunities, and investing in community development projects. The consortium has also established grievance mechanisms to address any concerns or complaints from local communities, ensuring that their voices are heard and their rights are respected.

Looking ahead, the BTC pipeline is poised to play an even greater role in the global energy landscape. As global energy demand continues to rise, the pipeline's capacity to transport 1 million barrels of oil per day will remain a critical asset for meeting this demand. However, the pipeline also faces a range of challenges, including the need to adapt to changing market dynamics, technological advancements, and evolving regulatory frameworks.

One of the key challenges is the transition to a low-carbon economy, which is likely to reduce global demand for fossil fuels in the long term. To remain competitive, the consortium will need to explore ways to reduce the pipeline's carbon footprint and align its operations with global sustainability goals. This could include investing in renewable energy projects, improving energy efficiency, and exploring carbon capture and storage technologies.

Another challenge is the evolving geopolitical landscape, which could impact the pipeline's operation and security. The consortium will need to remain vigilant and adaptable, ensuring that the pipeline remains resilient to potential disruptions and continues to serve as a reliable energy corridor. The Baku-Tbilisi-Ceyhan pipeline is a testament to the power of international collaboration and strategic vision. It has not only transformed

the economies of the host countries but also reshaped the geopolitical dynamics of the Caspian region and beyond. As a critical energy corridor, the pipeline has enhanced energy security, fostered regional integration, and contributed to global energy markets. However, its continued success will depend on the ability of the consortium and its stakeholders to navigate the challenges of a rapidly changing world. By remaining committed to sustainability, security, and social responsibility, the BTC pipeline can continue to serve as a model for future energy infrastructure projects[71].

Major Companies Operating Azerbaijan's Oil Pipelines

Azerbaijan's oil industry occupies a central position in the global energy market, supported by a consortium of major companies that manage and operate its extensive pipeline network. These entities synergize local technical expertise with substantial international resources, thereby ensuring a reliable and continuous flow of petroleum products to diverse global markets. SOCAR plays a pivotal role, engaging comprehensively across the entire supply chain—from exploration and extraction to refining, transportation, and distribution. SOCAR's integrated approach not only reinforces its leadership within the domestic sector but also exemplifies how state-led enterprises can drive industrial efficiency in a highly competitive international arena.

BP contributes significant capital investments and advanced technical knowledge, enhancing the oper-

71 John Roberts, "Caspian Pipeline Politics and European Energy Security", in *The South Caucasus 2021: Oil, Democracy and Geopolitics*, ed. Fariz İsmailzade et al. (Washington, DC: The Jamestown Foundation, 2012), 85.

ational capabilities of Azerbaijan's oil infrastructure. BP's involvement underscores the importance of multinational financial and technological support in optimizing production processes and achieving economies of scale. Similarly, TPAO leverages its robust regional connections to fortify operational strategies and facilitate closer integration with local energy stakeholders, thereby contributing to the stability and expansion of the pipeline network.

Chevron further augments Azerbaijan's energy sector by providing global operational expertise and an extensive international network, which are instrumental in penetrating new markets and adopting innovative technological solutions. Concurrently, Lukoil offers valuable partnerships and well-established distribution channels, which are critical for extending the reach of Azerbaijani oil products across varied geopolitical landscapes. Together, these companies ensure that Azerbaijan remains a vital energy supplier by maintaining high standards of efficiency, reliability, and technological innovation. The collaborative efforts of SOCAR, BP, TPAO, Chevron, and Lukoil not only secure the uninterrupted export of oil but also contribute significantly to the economic stability and strategic importance of Azerbaijan in the global energy sector.

A critical factor in the sustained success of Azerbaijan's oil industry is the Azerbaijan State Oil and Industry University (ASOIU), which has played an instrumental role in cultivating the technical expertise necessary for the country's energy sector. Established in 1920 under the name of Baku Polytechnic Institute, ASOIU traces its roots to the first petrotechnical department opened in 1910, marking the beginning of formal-

ized petroleum engineering education in Azerbaijan. This pioneering initiative laid the foundation for the development of a highly skilled workforce that has continually supported the nation's oil industry. Over the decades, ASOIU has become a prestigious institution, contributing significantly to the scientific and technological advancements within the energy sector and consistently produced specialists equipped to address the evolving challenges of the global oil market. The university's research initiatives have also played a crucial role in enhancing exploration techniques, optimizing extraction processes, and promoting sustainable practices within the oil industry, thereby aligning with the broader objectives of Azerbaijan's energy policy.



Azerbaijan State Oil and Industry University (ASOIU)

ASOIU's contributions to the oil industry and oil companies which are going to be mentioned below are further exemplified by its distinguished alumni, many of whom have assumed leadership positions within SOCAR and other major energy corporations. These graduates have not only advanced the opera-

tional capabilities of Azerbaijan's oil sector but have also represented the country in international politics.[72] Recognized among the top technical universities in the region, ASOIU continues to serve as a vital intellectual hub, fostering innovation and excellence in the energy sector.

The State Oil Company of The Azerbaijani Republic- SOCAR

The State Oil Company of the Azerbaijani Republic (SOCAR) is the national oil and gas company of Azerbaijan, established in 1992 following the country's independence from the Soviet Union. As a state-owned enterprise, SOCAR plays a central role in the exploration, production, refining, and distribution of Azerbaijan's hydrocarbon resources. Over the past three decades, SOCAR has evolved into a key player in the global energy market, contributing significantly to Azerbaijan's economic development and its integration into international energy networks.

72 Some of the distunguished alumnies are: President of Azerbaijan, Haydar Aliyev; President of Angola, José Eduardo dos Santos; President of LUKOIL, Vagit Alekperov; Minister of the gas industry of the USSR, Sabit Orujov; and others.



The State Oil Company of the Republic of Azerbaijan (SOCAR), 1992

SOCAR operates as a vertically integrated company, encompassing the entire value chain of the oil and gas industry. Its activities include upstream operations, such as exploration and production of oil and natural gas; midstream operations, including transportation and storage; and downstream operations, such as refining, petrochemical production, and marketing of petroleum products. SOCAR also engages in research and development, environmental protection, and the implementation of advanced technologies to enhance operational efficiency and sustainability.

The company's upstream activities are concentrated in the Caspian Sea region, particularly in the Azeri-Chirag-Guneshli (ACG) oil fields and the Shah Deniz gas field, which are among the largest hydrocarbon reserves in the region. SOCAR's midstream operations include the management of pipelines, such as the

Baku-Tbilisi-Ceyhan (BTC) oil pipeline and the South Caucasus Pipeline (SCP), which are critical for transporting Azerbaijani oil and gas to international markets. In the downstream sector, SOCAR operates refineries and petrochemical plants in Azerbaijan and abroad, producing a wide range of petroleum products for domestic consumption and export.

SOCAR is a cornerstone of Azerbaijan's economy, contributing significantly to the country's GDP, government revenues, and foreign exchange earnings. The oil and gas sector accounts for approximately 90% of Azerbaijan's export revenues and around 60% of its state budget, underscoring SOCAR's critical role in the nation's economic stability and growth. The revenues generated from SOCAR's operations have been instrumental in funding infrastructure projects, social programs, and economic diversification initiatives.

Beyond its economic contributions, SOCAR is a symbol of Azerbaijan's sovereignty and strategic autonomy in the energy sector. As the custodian of the country's hydrocarbon resources, SOCAR ensures that Azerbaijan retains control over its energy assets and maximizes the benefits of its natural wealth. The company's success in attracting foreign investment and forming strategic partnerships with international oil companies has enhanced Azerbaijan's position in the global energy market and strengthened its bargaining power in international negotiations.

SOCAR plays a pivotal role in Azerbaijan's foreign policy and international relations, particularly in the context of energy diplomacy. The company's activities have positioned Azerbaijan as a key energy supplier and transit hub, fostering strategic partnerships with

neighboring countries and global energy consumers. SOCAR's involvement in major energy projects, such as the BTC pipeline and the Southern Gas Corridor, has enhanced Azerbaijan's geopolitical significance and contributed to regional energy security.

The BTC pipeline, which transports Azerbaijani oil to the Mediterranean port of Ceyhan in Turkey, is a prime example of SOCAR's role in international energy cooperation. The pipeline, which became operational in 2006, has diversified export routes for Caspian oil, reducing dependence on traditional transit routes through Russia and enhancing energy security for European markets. The Southern Gas Corridor, encompassing the SCP, TANAP, and TAP pipelines, facilitates the delivery of Azerbaijani natural gas to European markets. This infrastructure plays a crucial role in enhancing Europe's energy diversification by providing an alternative supply source, thereby decreasing the continent's dependence on Russian gas and strengthening its energy security.

SOCAR's international partnerships extend beyond pipeline projects. The company has formed joint ventures and strategic alliances with leading international oil companies, such as BP, TotalEnergies, and Equinor, to develop Azerbaijan's hydrocarbon resources and explore new opportunities in the global energy market. These partnerships have facilitated the transfer of technology, expertise, and best practices, enhancing SOCAR's operational capabilities and competitiveness.



The State Oil Company of the Republic of Azerbaijan (SOCAR), today

SOCAR's presence in the global oil market is characterized by its active participation in international energy projects, its expanding portfolio of downstream assets, and its role as a reliable energy supplier. The company's downstream operations extend beyond Azerbaijan, with investments in refineries, petrochemical plants, and retail networks in Europe and Asia. SOCAR's acquisition of the Petkim petrochemical complex in Turkey and the construction of the STAR refinery, one of the largest refineries in the Mediterranean region, have strengthened its position in the global downstream sector. At the same time, SOCAR is the company that has made the most foreign investment in Turkey with an investment of 19.5 billion dollars.



Star Refinery, Aliagha-Izmir

SOCAR's international expansion reflects its strategic vision of becoming a global energy player. By diversifying its operations and investing in downstream assets, SOCAR has reduced its dependence on upstream revenues and enhanced its resilience to fluctuations in oil prices. The company's downstream investments also provide a stable source of income and create opportunities for value addition, contributing to Azerbaijan's economic diversification.

Despite its successes, SOCAR faces several challenges in the evolving global energy landscape. The transition towards renewable energy and the global push for decarbonization pose risks to the long-term demand for hydrocarbons. To address these challenges, SOCAR has embarked on a strategy of diversification and sustainability, exploring opportunities in renewable energy, energy efficiency, and carbon capture technologies. The company's commitment to environmental protection and sustainable development is reflected in its adoption of international standards and best practices.

Looking ahead, SOCAR's future prospects are closely tied to its ability to adapt to changing market dynamics and leverage its strengths in innovation, tech-

nology, and international partnerships. The company's continued investment in research and development, its focus on operational efficiency, and its commitment to sustainability will be critical in maintaining its competitiveness and ensuring its long-term success.

The British Petroleum Company- BP

British Petroleum, commonly referred to as BP, is one of the world's largest integrated oil and gas companies, actively involved in every part of the hydrocarbon value chain, from exploration and production to refining, distribution, and marketing. Its evolution over more than a century reflects both the changing global economic landscape and the geopolitical intricacies of resource control. Historically tied to British strategic interests, the company has operated in pivotal regions such as the Middle East, North America, and the North Sea, and it continues to expand into new territories. Over the years, BP's size, influence, and strategic partnerships have made it not just a commercial entity, but also an influential actor in international relations and energy markets.

BP's origins date back to 1901 when British entrepreneur William Knox D'Arcy obtained a concession from the Shah of Persia to explore for oil. This initiative resulted in the Middle East's first significant commercial oil discovery at Masjed Soleiman in 1908.[73] Consequently, the Anglo-Persian Oil Company (APOC) was established in 1909, marking the foundation of what would later become BP. Recognizing the importance of petroleum to power its navy, the British government soon acquired a significant financial stake in APOC, providing

73 Frankopan, *The Silk Roads*, 339-340.

political backing that allowed the company to expand its concessions and construct the necessary refining infrastructure. During both World Wars, APOC's operations were essential to fueling British military efforts, cementing its position as a strategically critical enterprise.



Reza Khan visiting Abadan Refinery, 1930.

Yet the growing perception that foreign interests were exploiting Iran's natural resources triggered resentment among Iranian nationalists, culminating in the nationalization of the country's oil industry under Prime Minister Mohammad Mossadegh in 1951. A month later, oil exports from the world's largest refinery came to a complete stop. At that time, Abadan was providing 16% of the OEEC's refined oil and over a quarter of all refined products outside the Western Hemisphere.[74] This action led to an international crisis, eventually resulting in Mossadegh's removal from power and the creation of a consortium in which APOC, by

74 Vessela Chakarova, *Oil Supply Crises,* (United Kingdom: Lexington Books, 2013), 94.

then renamed the Anglo-Iranian Oil Company (AIOC), shared production with other oil majors. The company subsequently changed its name to the British Petroleum Company in 1954.

From the 1950s onward, BP diversified its geographic presence, not just in the Middle East but also in places like Kuwait and Iraq, where it sought concessions and joint ventures. As OPEC (Organization of the Petroleum Exporting Countries) gained prominence in the 1960s and 1970s and started to exert greater control over oil production and pricing, multinational firms like BP faced the challenge of rebalancing their portfolios and renegotiating terms with host governments. BP's strategic move into new production areas, particularly in Alaska's Prudhoe Bay following major discoveries in 1968, and in the North Sea, helped shield it from some of the market volatility associated with Middle Eastern politics. These investments were capital-intensive, but they underscored BP's capacity to operate in diverse environments, including offshore fields that required advanced extraction technologies.

As one of the world's "supermajors," BP wields considerable influence in energy markets. It has historically served as a channel for technology transfer, capital investment, and the development of large-scale infrastructure projects, thereby fostering complex relationships with host countries. In many instances, governments look to BP to develop challenging oil and gas fields, especially deepwater or otherwise high-risk areas. In turn, the company's operations involve negotiating production-sharing agreements, forging joint ventures, and handling delicate matters of sovereignty and resource nationalism. The outcomes of these negotiations often

have significant economic and political implications for both the company and the host nations, affecting everything from tax revenues to employment levels and diplomatic relations.

One region where BP's activities have been especially significant is Azerbaijan. Since the early 1990s, following the dissolution of the Soviet Union, BP has taken a leading role in tapping the vast hydrocarbon resources of the Caspian Sea, particularly through projects centered around Baku, Azerbaijan's capital and historical oil hub. A cornerstone of BP's involvement is the Azeri-Chirag-Gunashli field, a major offshore development that has attracted global attention and investment. Beyond exploration and production, the company also participates in pipeline projects, such as the Baku-Tbilisi-Ceyhan pipeline, which transports crude oil from the Caspian Sea to the Mediterranean, connecting a resource-rich region to international markets. The collaboration with the Azerbaijani government underscores BP's capacity to operate in politically sensitive environments and shape local energy sectors. This partnership has significantly increased Azerbaijan's export capacity, generating substantial revenues for the country and highlighting BP's enduring strategy of establishing long-term engagements in pivotal oil-producing regions.

A key turning point in BP's contemporary history was the Deepwater Horizon disaster in 2010, which had widespread ramifications in terms of human safety, environmental harm, and corporate governance. The explosion on the drilling rig in the Gulf of Mexico killed eleven workers and resulted in one of the largest marine oil spills in history. Over the ensuing months, mas-

sive volumes of oil gushed into the ocean, devastating marine ecosystems and shoreline communities. From a financial perspective, BP faced enormous penalties, clean-up expenses, and compensation claims. The incident cast a long shadow over the company's reputation, spurring debates on corporate accountability and the heightened risks of deepwater exploration. Regulators in the United States and elsewhere tightened oversight of offshore drilling, affecting not only BP but also the entire industry. In responding to the disaster, BP established a compensation fund for affected individuals and businesses, a process that was scrutinized by policymakers, legal experts, and environmental advocacy groups.

Despite these challenges, BP retains its pivotal role in global oil and gas markets. It operates in dozens of countries across multiple continents, managing a vast network of upstream and downstream activities. In some regions, such as Africa, it engages in large-scale exploration and production efforts that require complex logistical support and significant capital. In Russia, BP once partnered with local shareholders in the TNK-BP joint venture, a collaboration that demonstrated both the opportunities and complications inherent in working within politically sensitive and heavily regulated markets. While the venture was lucrative, it also involved disagreements and legal disputes, eventually leading to BP selling its stake, yet the experience served as a lens into the complexities of operating in resource-rich but often politically volatile countries.



BP Headquarter, London

The company's influence extends far beyond economics. In international relations, BP's historical association with the British government demonstrates how energy security and diplomatic considerations can intertwine with corporate interests. Although the government divested most of its stake in the company during the late twentieth century, BP's status as a British-based energy giant means it continues to factor into geopolitical strategies and national discussions about energy independence. Over the decades, the firm's negotiations with various regimes, from the Middle East to post-Soviet states, have underscored the balancing act inherent in securing energy concessions while managing public perceptions and diplomatic frictions.

Today, BP faces the dual challenge of responding to evolving market conditions and addressing calls for a transition to lower-carbon energy sources. Many of the world's leading economies have strengthened their commitments to reducing greenhouse gas emissions, creating a competitive environment for renewable energy technologies and raising questions about the long-term viability of new fossil fuel projects. BP has announced intentions to invest more heavily in cleaner energies, including solar and wind, as well as carbon capture and storage. Nevertheless, critics argue that the fundamental economics of the oil and gas sector—and the political influence wielded by powerful industry actors—can complicate or stall meaningful change. How BP reconciles its extensive oil and gas operations with stated ambitions for a more sustainable future will likely shape its reputation and market position in the coming decades.

From an economic perspective, BP remains a formidable multinational, employing thousands of workers, paying substantial taxes in various jurisdictions, and supplying a significant share of the world's fuel. It continues to invest in new technologies to improve efficiency in areas such as refining and petrochemicals, even as it courts new revenue streams beyond conventional hydrocarbon extraction. Politically, it remains an influential partner for many governments, capable of bringing considerable financial resources and technical expertise to large-scale projects. Its history in Iran serves as a cautionary tale of how commercial ambitions can become entangled with nationalist sentiments, great power rivalries, and domestic political struggles.

Turkish Petroleum Corporation- TPAO

Turkish Petroleum Corporation, commonly referred to by its acronym TPAO, is the national oil company of the Republic of Turkey, established in 1954 with the initial aim of exploring, extracting, refining, and marketing petroleum resources for the country. Over the decades, TPAO's mandate has expanded in response to Turkey's increasing energy demands and the broader geopolitical significance of the region. It now plays a pivotal role in the national economy, serves as a key component of Turkey's foreign policy strategies, and is an important participant in international oil and gas markets. TPAO's evolution from a relatively modest organization focused on domestic onshore fields in southeastern Anatolia to an entity with multinational operations exemplifies Turkey's broader transformation into a regional energy corridor and emerging hub for hydrocarbons.

From its inception, TPAO's strategic orientation was closely tied to Turkey's domestic and regional priorities. In the post-Second World War era, the Turkish government recognized the economic and political necessity of achieving a degree of energy self-sufficiency, or at least reducing the nation's reliance on imports from volatile regions. Early exploration efforts focused on Turkey's southeastern provinces, where promising geological surveys suggested moderate oil potential. Over time, TPAO developed partnerships with foreign oil companies, acquiring both technical know-how and the capital to expand upstream operations. By the 1960s and 1970s, TPAO was entrenched as a key stakeholder in Turkey's nascent energy landscape, laying the groundwork for refining and marketing operations in parallel with its growing exploration activities.

As global demand for hydrocarbons grew, TPAO also sought to position itself as an international player. While its core mandate continued to involve securing oil and gas resources for domestic consumption, TPAO explored opportunities abroad, driven by a desire to diversify Turkey's energy portfolio. Establishing joint ventures and obtaining minority stakes in overseas fields became a practical way to access larger reserves and expand technological capabilities. Over time, the company gained expertise in offshore drilling, enhanced seismic surveying, and reservoir management. This international expansion occurred gradually but contributed to TPAO's evolution into a more comprehensive, vertically integrated entity that spanned upstream, midstream, and downstream operations.

Turkey's geopolitical position at the intersection of Europe, Asia, and the Middle East has conferred upon TPAO and other national stakeholders a significant role in shaping energy corridors. With Europe seeking to diversify its natural gas imports away from dependence on a few major suppliers, Turkey emerged as a transit route for pipelines delivering hydrocarbons from the Caspian region and the Middle East to European markets. TPAO's position in these pipeline projects is not merely a commercial venture but a diplomatic instrument. The presence of these pipelines, such as the Baku-Tbilisi-Ceyhan (BTC) oil pipeline and the Trans-Anatolian Natural Gas Pipeline (TANAP), strengthens Turkey's ties to producing nations while augmenting its leverage with energy-importing countries in Europe. TPAO has played an active role in such initiatives, aligning its operational interests with Turkey's long-term objective of becoming a key energy hub, thereby bolstering the nation's strategic relevance in international

relations.

In addition to onshore fields, TPAO has dedicated considerable resources to exploring offshore prospects in the Black Sea and the Mediterranean. These maritime domains have at times proven geologically challenging, but technological advances have made ultra-deepwater drilling and complex geological formations more accessible. Recent discoveries, such as the Sakarya gas field in the Black Sea, underscore the potential for Turkey to rely increasingly on domestic resources. While such finds may not catapult Turkey into the ranks of the world's top hydrocarbon exporters, they do hold the promise of reducing the country's costly energy imports and potentially transforming TPAO's role from a predominantly domestic supplier to a modest regional exporter. These offshore endeavors are not without controversy, particularly in the eastern Mediterranean, where overlapping maritime claims and geopolitical disputes have tested TPAO's ability to operate in contested waters. Nonetheless, these efforts reflect an aspirational drive within Turkey's energy policy framework to harness indigenous resources wherever feasible.

As a state-owned enterprise, TPAO has historically been utilized as an instrument of Turkish foreign policy, especially in regions where Turkey seeks to cement political and economic influence. One such region is northern Iraq, including the Kurdistan Regional Government (KRG) area, which holds significant oil and gas reserves and is geographically adjacent to southeastern Turkey. In this environment, TPAO faced political complications and sometimes had to navigate delicate territorial and governance issues. Nevertheless, investments in northern Iraq highlight TPAO's pursuit of energy diversifica-

tion and the Turkish government's broader strategic interests in maintaining stability and fostering economic growth in adjacent regions. These cross-border endeavors illustrate the dual role of national oil companies as both commercial entities seeking returns on investment and diplomatic actors furthering the policies of their home states.

Beyond the Middle East, TPAO has explored partnerships in regions such as North Africa and Central Asia. While the scale of these undertakings varies, they reflect Turkey's willingness to extend its diplomatic network through energy cooperation. Commercial viability, however, remains paramount. It is often through large consortia—bringing together international oil companies, technology providers, and local partners—that TPAO participates in exploration and production. This consortium-based approach has allowed TPAO to share financial risks and benefit from more advanced technological competencies. Though this strategy means TPAO typically remains a minority shareholder, it also ensures a degree of insulation from the full brunt of market volatility.

In the broader international oil and gas market, TPAO's status as a national oil company places it in a category of actors that enjoy unique relationships with their respective governments, shaping both corporate strategy and national policy. Like other national oil companies, TPAO has certain responsibilities that extend beyond mere profitability. In times of global market disruptions—like price spikes or shortages—TPAO is expected to prioritize domestic needs or stabilize supply, even if this conflicts with pure commercial objectives. Such obligations underscore the special status

national oil companies hold within the energy sector, differentiating them from purely private entities and binding them more closely to state interests.



Turkish Petroleum Corporation

TPAO's importance is amplified by Turkey's quest for energy independence and security. Owing to limited domestic hydrocarbon reserves, Turkey relies heavily on imports, particularly of natural gas, from countries such as Russia, Azerbaijan, and Iran. This dependency has been a key driver for TPAO's search for new domestic fields and its involvement in international pipeline consortia. Equally, it has motivated the government to grant TPAO the political and financial backing necessary for large-scale exploration campaigns. The firm's ability to successfully discover and develop new fields—or to secure stakes in overseas reserves—can directly impact Turkey's trade balance and diminish its vulnera-

bility to supply disruptions. As global energy markets undergo transformations, including the gradual shift to renewables, TPAO faces the challenge of preparing for a future where oil and gas may be less dominant. Yet, the near-term economic and political realities suggest hydrocarbons will continue to play a central role in Turkey's energy mix for years to come, cementing TPAO's significance.

The strategic alignment between TPAO and Turkish policymakers also manifests in broader regional integration efforts. Initiatives aimed at linking the Middle East and Caspian Basin to European consumers often involve negotiations that transcend commercial considerations, delving into security alliances and diplomatic alignments. TPAO's involvement in such projects ensures that the Turkish state maintains an active presence in these negotiations. Although the technical expertise TPAO offers is indispensable, its political utility—especially in forging or solidifying cross-border relationships—can be just as critical. When tensions arise in geopolitically sensitive areas, TPAO's operations can either be a source of friction or a conduit for cooperation, depending on the broader diplomatic context.

One notable aspect of TPAO's international ventures has been its relationship with Baku, the capital of Azerbaijan. Since the dissolution of the Soviet Union, Azerbaijan emerged as a key hydrocarbon producer in the Caspian region. TPAO's partnership with Azerbaijani counterparts, most notably in the Azeri-Chirag-Gunashli oil fields and the Shah Deniz natural gas field, has been emblematic of the close bilateral ties between Turkey and Azerbaijan, often encapsulated in the phrase "one nation, two states." TPAO's stake in

these projects has not only contributed to Turkey's energy security but also reinforced its role as a vital transit and marketing route to global markets. The Baku-Tbilisi-Ceyhan pipeline, one of the longest oil pipelines in the world, is a triumph of energy diplomacy and a testament to the deep economic and political partnership that TPAO helped foster.

Looking ahead, TPAO's trajectory will be shaped by several factors: the volatility of global oil prices, Turkey's domestic energy reforms, technological advancements in exploration and production, and broader international commitments to reduce carbon emissions. As multiple nations accelerate the shift towards greener energy sources, TPAO will need to adapt by exploring areas such as natural gas—which is often considered a transition fuel—and potentially investing in cleaner energy solutions. However, the extent to which TPAO invests in renewables or carbon capture technologies will depend on both the Turkish government's directives and commercial imperatives. Even if a full-scale global energy transition unfolds, many analysts predict that natural gas will remain an important component of the energy mix in Turkey and the region for decades.

In many respects, TPAO stands at a crossroads between tradition and innovation, emblematic of how national oil companies can no longer rely solely on the extraction and sale of fossil fuels for sustained growth. The public and private sectors alike are increasingly conscious of environmental concerns and the imperative to diversify energy systems. Although the Turkish government's stance on energy transition may not be as aggressive as that of some European states, it has still indicated a willingness to explore alternatives like renew-

able energy and nuclear power. For TPAO, a cautious but deliberate pivot could be advantageous, ensuring that it remains relevant as the global energy landscape evolves.

Chevron

Chevron is one of the world's largest multinational energy corporations, active in every segment of the oil and gas industry from exploration and production to refining, distribution, and marketing. It has a long-standing historical legacy tracing back to the late nineteenth century, when the global petroleum business was in its early stages. Over time, Chevron evolved through mergers, acquisitions, and strategic expansions, becoming one of the so-called "supermajor" oil companies that command significant influence over international energy markets. Its corporate development, shaped by broader economic and geopolitical trends, underscores the interplay between commercial ambitions, resource availability, and global diplomacy. Chevron's activities in various parts of the world, including in the Caspian region, have had considerable implications for local economies and global energy security.

Chevron can trace its origins to the Pacific Coast Oil Company, founded in 1879. It later became part of the Standard Oil conglomerate, which by the early twentieth century had grown to dominate oil refining and marketing in the United States. Following the U.S. Supreme Court's dissolution of the Standard Oil trust in 1911, a number of successor companies emerged, each carrying historical links to the original organization. One of these successors, Standard Oil Company (California), commonly known as SoCal, subsequently expanded its

operations beyond California, laying the groundwork for what would eventually become Chevron. During the first half of the twentieth century, SoCal engaged in exploration activities in the western United States and pursued international ventures, including significant undertakings in the Middle East, where oil concessions promised vast reserves.

Throughout the mid-twentieth century, SoCal continued to consolidate its presence in various regions by establishing partnerships and drilling for oil in countries like Saudi Arabia. These efforts proved instrumental in shaping the global petroleum industry and securing energy supplies for industrialized economies. In 1933, SoCal's subsidiary signed a concession agreement that led to the formation of the Arabian American Oil Company (Aramco), a partnership that would later become Saudi Aramco. Over the following decades, this arrangement not only contributed to the development of Saudi Arabia's oil infrastructure but also enabled SoCal—renamed Chevron in 1984—to exert considerable influence in international petroleum markets.

As petroleum demand soared following the Second World War, Chevron intensified its search for new reserves worldwide, motivated by the strategic imperative to remain competitive among a group of large integrated oil companies. With refining and marketing networks growing more sophisticated, the company sought to ensure the reliability of its upstream supply chain. Technological innovations in seismology and drilling made offshore exploration possible, prompting Chevron to invest heavily in marine concessions in the Gulf of Mexico and other coastal regions. These advances allowed it to gain expertise in deepwater drilling,

an area that would become more critical in subsequent decades.

The second half of the twentieth century witnessed significant shifts in the global energy system. The formation of OPEC (Organization of the Petroleum Exporting Countries) in the 1960s gave a new level of bargaining power to resource-rich nations, and nationalization became a recurring theme among many oil-producing countries. In this climate, multinational oil companies like Chevron found themselves having to renegotiate concessions or operating under production-sharing agreements. Chevron's strategy during these years was marked by a balance between preserving access to producing fields, forging alliances with host governments, and seeking new opportunities. When Middle Eastern producers claimed greater control, Chevron, along with other supermajors, looked to emerging frontiers such as Africa, Latin America, and Southeast Asia to diversify its portfolio.

Chevron's modern corporate structure owes much to strategic mergers and acquisitions over the course of the late twentieth and early twenty-first centuries. A seminal event was the 2001 merger of Chevron and Texaco, which brought together two major American oil companies, strengthening upstream capabilities and broadening global reach. Following this merger, the entity was briefly known as ChevronTexaco before reverting to Chevron Corporation. Another important acquisition came in 2005, when Chevron acquired Unocal Corporation, thereby expanding its natural gas holdings, especially in Asia, and acquiring new technical expertise in deepwater drilling. These moves positioned Chevron as a major integrated energy company, able

to pursue complex projects that required substantial financial and technological resources.

One of Chevron's distinctive attributes is its integrated structure, which connects upstream activities—exploration and production of crude oil and natural gas—with midstream and downstream operations, including the transport of hydrocarbons, their refining into various products, and their marketing. This integration allows Chevron to navigate the volatility of global oil and gas prices by balancing returns across different parts of the value chain. When crude oil prices fall, refining margins can sometimes improve, and vice versa. The capacity to operate across the entire spectrum of oil and gas helps large companies like Chevron maintain stability and continue investing in long-term exploration projects and infrastructure.

Given the strategic importance of oil and gas, Chevron has consistently occupied a prominent place in international relations. Energy security is a concern for most industrialized nations, and Chevron's large-scale operations in multiple regions have led to interactions with a range of governments and international organizations. Host countries have often courted Chevron for its technological prowess and capital, recognizing the role the company can play in developing national hydrocarbon resources. At the same time, Chevron's presence can raise concerns about environmental stewardship, equitable revenue distribution, and local job creation. In some instances, these political and economic dynamics have sparked debates and controversies about the role of multinational oil companies in shaping domestic policies.

Another dimension of Chevron's importance in-

volves its role in responding to environmental challenges and engaging in the energy transition. As global discourse around climate change and renewable energy intensifies, Chevron has faced pressure from shareholders, governments, and civil society groups to diversify beyond oil and gas and reduce its carbon footprint. Like other supermajors, it has declared strategies to invest in lower-carbon opportunities, including hydrogen, carbon capture, and renewable energy technologies. Nevertheless, its core business remains predominantly focused on hydrocarbons, raising questions about the pace and sincerity of its transition efforts. This tension between traditional fossil fuel operations and emergent green strategies exemplifies the broader dilemma confronting multinational oil companies as they attempt to adapt to shifting regulatory and market contexts.

Beyond geopolitics, Chevron's operational footprint includes significant pipelines, joint ventures, and LNG (liquefied natural gas) facilities, which anchor its role in global energy trade. In certain regions, such as West Africa, the company's investments in offshore projects have spurred local economic development while also drawing criticism for environmental risks and the complexities of revenue management. In Asia-Pacific, Chevron engages in large-scale LNG projects in Australia, reflecting a market-driven shift toward cleaner-burning natural gas in some economies. To manage these ventures, Chevron often partners with other international oil companies, local national oil companies, and private investors, creating networks of interdependence that link upstream production sites to downstream markets across multiple continents.

In Latin America, Chevron has at times faced political

volatility, particularly in countries with changing regulatory regimes or nationalist energy policies. Aligning corporate objectives with host-government expectations has required careful navigation of complex legal and political landscapes. Over the years, Chevron has both divested from certain countries and increased its investments in others, illustrating its flexible approach to geographic diversification. While risk management is intrinsic to any hydrocarbon enterprise, the scale of Chevron's operations often brings it into heightened scrutiny, making it a focal point for debates about resource sovereignty, environmental protections, and corporate responsibility.

Like other supermajors, Chevron invests in research and development, seeking to enhance the efficiency of extraction and refining processes. Technological innovations, including advanced drilling techniques and digital optimization, help the company sustain production from mature fields and tap into unconventional resources such as shale formations. Despite fluctuations in global commodity prices, Chevron's financial resources enable it to maintain a continuous cycle of exploration and production, reinforcing its position in global markets. In times of crisis, such as sharp declines in oil prices or geopolitical tensions in key producing regions, Chevron's scale and diversification often afford it resilience that smaller companies may lack.

One of the lesser-known but significant areas of Chevron's operations can be seen in the Caspian region, particularly in the context of Azerbaijan. The Caspian Basin, long known for its hydrocarbon potential, became a renewed focus of international interest after the dissolution of the Soviet Union, when newly

independent states sought foreign partnerships to develop oil and gas fields. Chevron played a role in the development of Azerbaijani oil, particularly through its stake in the Azeri-Chirag-Gunashli (ACG) fields in the Caspian Sea and the associated pipelines, such as the Baku-Tbilisi-Ceyhan (BTC) pipeline. These initiatives helped create new export routes bypassing traditional channels and offered Azerbaijan a degree of economic and political autonomy. While Chevron eventually sold its stake in ACG and the BTC pipeline in the late 2010s, its involvement in the region showcased the strategic importance of Caspian resources to global markets and underscored Chevron's willingness to engage in challenging operating environments for long-term returns.



New headquarter of Chevron, Houston

Another major aspect of Chevron's standing in international oil markets is its capacity to shape global supply due to its production volumes and partnerships. Even though the petroleum market's pricing mechanisms

are often driven by a complex interplay of futures trading, OPEC production decisions, and macroeconomic indicators, supermajors like Chevron still play a role by influencing capital investment cycles, technological standards, and commercial practices in host countries. Through its extensive supply chain, Chevron can coordinate large-scale development projects that involve thousands of workers, intricate regulatory compliance, and multi-billion-dollar investments in infrastructure. This scale has at times enabled the company to advance new technological frontiers, forging best practices in drilling, reservoir management, or environmental safety measures that gradually become industry norms.

In terms of corporate governance, Chevron, like other publicly traded energy giants, faces pressure from institutional investors, activist groups, and policymakers who call for higher standards of transparency, decarbonization, and community engagement. The company's annual shareholder meetings often serve as an arena for debates over climate-related resolutions, executive compensation, and other governance questions. Chevron has responded by releasing sustainability reports, announcing emissions-reduction targets, and undertaking environmental initiatives, although these moves are frequently met with skepticism about their scope and efficacy. The broader challenge confronting Chevron is balancing short-to-medium-term profitability from hydrocarbons with the necessity of aligning longer-term strategies to a rapidly evolving energy landscape and intensifying climate policies.

Lukoil

Lukoil is one of the largest vertically integrated oil

and gas companies in Russia, and it occupies a distinctive position in the global energy landscape. Established in the early 1990s following the collapse of the Soviet Union, the company has grown into a major corporate entity that engages in every segment of the hydrocarbon value chain: exploration, production, refining, transportation, and marketing. Its formation and rise mirror the broader economic and political transformations that took place in Russia after the dissolution of Soviet power structures. Over the course of its existence, Lukoil has secured a formidable international presence through asset acquisitions, joint ventures, and partnerships with various state and private actors. It has also encountered controversies and geopolitical complexities, much like other energy multinationals operating in sensitive markets. Lukoil's evolution offers insights into how Russian companies have adapted to the post-Soviet reality, navigated privatization processes, and asserted their influence beyond national borders.

The company traces its origins to a decree by the Russian government in 1991 that consolidated three western Siberian state-owned enterprises: Langepasneftegaz, Urayneftegaz, and Kogalymneftegaz. The first letters of each "L", "U" and "K" were combined to form the name Lukoil. This reorganization occurred during a period in which the Russian Federation sought to liberalize its economy, privatize large state assets, and integrate with global markets. Initially, the company's principal assets and operations were concentrated in the prolific oil-rich regions of western Siberia. However, it did not take long for Lukoil to look beyond this area to acquire refineries, distribution networks, and export routes, thereby developing the hallmark of a vertically integrated energy company. By the mid-1990s, Lukoil was listed on in-

ternational stock exchanges, including those in London and New York, in pursuit of foreign capital and broader global visibility.

The privatization process during Russia's market transition often drew criticism for its opacity and potential inequities, but it provided energy enterprises like Lukoil with opportunities to become publicly traded giants. Over time, Lukoil invested heavily in technology and equipment, seeking to modernize extraction techniques in mature fields and expand into underexplored territories. In parallel, the company began setting up or acquiring refineries both inside and outside Russia, allowing it to process significant volumes of crude oil and produce refined products for domestic and international consumption. As refined oil products often carry higher margins, controlling downstream operations became essential for Lukoil's profitability and competitiveness. Moreover, by owning its distribution network, including gas stations in Russia and abroad, Lukoil has been able to tap into consumer markets more directly.

By the late 1990s and early 2000s, Lukoil's footprint extended beyond the confines of the former Soviet Union. The company established production-sharing agreements and joint ventures in countries across the Middle East, Central Asia, Africa, and the Americas, motivated by a desire to diversify its resource base and mitigate risk in any single region. In doing so, Lukoil followed a strategy resembling that of other global supermajors, leveraging its technological expertise in areas such as drilling in harsh climates, given its experience in Siberia. These international endeavors also served Russia's broader aim of projecting economic and geopolitical influence worldwide, often aligning with

state interests in forging ties with governments in resource-rich regions.



Lukoil headquarter, Moscow

Despite its largely private ownership structure, Lukoil's relationship with the Russian government remains significant. Energy companies in Russia must maintain constructive ties with the state, given the critical role oil and gas revenue plays in the national economy and the intricate licensing frameworks governing exploration and production. While Lukoil is not a state-owned company in the same way as Rosneft or Gazprom, it still operates in a system where political considerations can affect strategic decisions. This environment, combined with ongoing international sanctions impacting various segments of the Russian economy, has led Lukoil to navigate a delicate path that balances compliance with global financial norms and responsiveness to domestic policy priorities.

Lukoil's expansion strategy involves focusing on both mature fields and new frontiers. In Russia, many of its Siberian fields are aging, necessitating enhanced oil recovery techniques and new investments to sustain production levels. The company has increasingly turned to offshore areas in the Caspian Sea, Arctic regions, and other geologically challenging areas where technological sophistication is paramount. Internationally, Lukoil has participated in major upstream projects in countries such as Iraq, where the West Qurna-2 field represented a substantial opportunity for boosting the company's reserves. Such foreign engagements carry heightened risks, due to political instability, security threats, and shifting contractual environments. Nonetheless, success in these ventures can offer high returns and long-term supply contracts, strengthening Lukoil's standing among the largest energy companies worldwide.

Like other oil and gas majors, Lukoil's role in international relations arises from the strategic nature of hydrocarbons. Energy is closely intertwined with national security, trade balances, and diplomatic leverage. Lukoil's presence in foreign markets often opens channels for intergovernmental cooperation or tension, depending on the political climate. The company's joint ventures in Central Asia, for instance, engage with states that are strategic partners of Russia or important transit routes for hydrocarbons traveling to European and Asian markets. In such instances, Lukoil can act as a quasi-diplomatic actor, as stable oil and gas development projects tend to require government cooperation on issues ranging from taxation to infrastructure and security. Conversely, the company must also contend with economic nationalism, environmental regulations, and calls for increased transparency in regions where

civil society is strong or corruption is scrutinized.

An important aspect of Lukoil's operations involves refining and marketing, areas in which the company has tried to develop a recognizable brand. It operates gas station networks in numerous countries, aiming to compete with Western supermajors on the basis of service quality and price. While not as ubiquitous as some Western competitors, Lukoil stations in Eastern Europe, Central Europe, and parts of the United States exemplify its ambition to be seen as a global brand, not merely a Russian exporter of crude. These downstream pursuits not only expand revenue streams but also allow Lukoil to gain more stable earnings, as refining and retail are less vulnerable to the wild fluctuations of crude oil prices.

Environmental impact and corporate social responsibility are also part of Lukoil's public narrative. The company, like many of its peers, publishes sustainability reports detailing efforts to reduce flaring, promote energy efficiency, and preserve ecosystems in operational areas. Nevertheless, critics frequently highlight that oil exploration in ecologically fragile regions—such as parts of the Arctic—presents significant risks. Lukoil's track record on environmental matters and transparency is mixed; while it has made strides to conform to international best practices, particularly in projects with foreign partners, some observers argue there is room for improvement in aligning with global sustainability benchmarks and ensuring robust oversight of its subcontractors.

The international sanctions regime that Russia has faced in recent years poses another challenge for Lukoil's growth and financing options. Although the

sanctions often target state-run enterprises, banks, and certain individuals, the broader business environment in Russia affects all large corporations. Currency fluctuations, credit availability, and investor sentiment become more unpredictable, potentially driving up the cost of capital for long-term projects. Lukoil attempts to mitigate these risks by diversifying its financial partnerships and using revenue from existing stable projects to fund new explorations. Nevertheless, such constraints complicate the landscape in which Lukoil operates, especially when it seeks advanced drilling technologies or foreign investment for joint ventures in offshore areas.

Despite these headwinds, Lukoil remains integral to Russia's oil output and a critical supplier to various overseas markets. Its shares trade on major stock exchanges, and it reports production, reserves, and financial data comparable to that of other internationally oriented oil companies. Observers of global energy markets often track Lukoil's movements, acquisitions, and negotiations as a bellwether for the Russian private sector's capacity to function and expand under both domestic regulations and international scrutiny. In effect, Lukoil's performance can reflect wider trends in Russia's economic diversification, state-business relations, and resource-based foreign policy.

One noteworthy aspect of Lukoil's international reach has been its engagement in the Caspian region, particularly its ventures in Azerbaijan. Historically, the Caspian Sea basin has been a cradle of the oil industry, with Baku enjoying a storied past as a major petroleum center since the late nineteenth century. Lukoil has maintained a stake in several upstream projects in Azerbaijan, including participation in consortia explor-

ing and developing offshore fields. These collaborations have placed it alongside other global majors, as well as Azerbaijan's state energy company SOCAR, in extracting and marketing the region's hydrocarbon resources. The Baku-Tbilisi-Ceyhan (BTC) pipeline and other export routes have further facilitated the movement of Caspian oil to global markets. Lukoil's relationship with Baku underscores the interplay between Russian private enterprises and neighboring post-Soviet states, highlighting both shared economic objectives and the delicate diplomatic context in which such deals occur.

Looking to the future, Lukoil confronts the industry-wide challenge of balancing traditional hydrocarbon extraction with the global shift toward decarbonization and renewable energy. While the company has made limited investments in renewable technologies, the bulk of its capital expenditures remain in upstream oil and gas. This reflects an expectation that oil and gas will continue to play a substantial role in the global energy mix for decades, especially in developing countries that prioritize affordability over carbon intensity. Nonetheless, as discussions about climate change intensify and international regulations evolve, Lukoil may find it increasingly prudent to allocate resources to cleaner technologies, embrace natural gas as a transition fuel, or explore carbon capture solutions.

In line with these concerns, the company must also manage stakeholder expectations within Russia, where high reliance on hydrocarbon revenues underpins national budgets. Even though Lukoil is predominantly private, the health of the Russian oil sector, inclusive of both state-owned and private entities, directly impacts macroeconomic stability. Any shift in global oil demand

or drastic price fluctuations can reverberate across government finances, currency valuations, and social programs. Lukoil, therefore, acts as a stabilizing force in many respects but also shoulders the responsibility of adjusting production according to national and OPEC+ agreements.

Summarizing Lukoil's significance requires understanding both its national and international dimensions. Domestically, it exemplifies how a Russian firm navigated the tumultuous transition from a centrally planned economy to a privatized, market-driven environment, successfully transforming itself into a leading energy company with a global footprint. Internationally, Lukoil plays the role of a major oil and gas supplier, forging partnerships in multiple continents and influencing world energy flows. It often must adapt to sanctions, environmental criticisms, and shifting political landscapes, yet it has maintained considerable growth over the past three decades. The firm's continuing exploration of frontier regions—from the Arctic to deepwater locales in overseas basins—indicates a determination to preserve and expand its resource base, despite the uncertainties inherent in the global shift toward lower-carbon energy systems.

VI

THE PLACE OF BAKU OIL IN WORLD POLITICS

Baku oil has historically held a significant position in global energy politics, shaping economic, geopolitical, and strategic developments for over a century. From the late 19th century, when Baku emerged as one of the world's leading oil-producing regions, to the present day, Azerbaijan's energy resources have played a crucial role in international markets, energy security, and geopolitical alignments. The strategic location of Azerbaijan, positioned at the crossroads of Europe and Asia, has further enhanced its importance in global energy networks, particularly within the context of the One Belt One Road (OBOR) initiative led by China. The evolving dynamics of energy demand, supply diversification, and regional integration continue to shape the future perspectives of Baku oil, ensuring its relevance in global energy governance and security frameworks.

The international significance of Baku oil can be traced back to the 19th and early 20th centuries when the

region became a key supplier of petroleum for industrialized nations. The rapid development of the Baku oil fields under the control of Russian and Western companies, notably the Rothschilds and the Nobel Brothers, positioned Azerbaijan as a crucial player in the global energy market. By the early 20th century, Baku accounted for a substantial portion of the world's oil production, fueling industrial revolutions and military campaigns. The Soviet era further cemented Azerbaijan's role in global energy security, with Baku's oil fields supplying critical resources during World War II and the Cold War. The post-Soviet period marked a new phase in Azerbaijan's energy strategy, as the country regained sovereignty over its natural resources and actively engaged in international energy markets through projects such as the BTC pipeline.

Despite Azerbaijan's significant economic gains from oil exports, its economy remains highly dependent on hydrocarbons, making diversification a strategic necessity. The oil and gas sector accounts for a substantial share of Azerbaijan's GDP, government revenues, and export earnings. While the influx of energy revenues has fueled economic development, infrastructure modernization, and social programs, the overreliance on oil exposes Azerbaijan to fluctuations in global energy prices, posing risks to economic stability. Recognizing this challenge, the Azerbaijani government has prioritized the expansion of the non-oil economy, particularly in agriculture, tourism, manufacturing, and technology. Efforts to develop alternative sectors aim to reduce dependency on hydrocarbons, create sustainable employment opportunities, and enhance economic resilience against global energy market volatility. The promotion of renewable energy sources, particularly wind and so-

lar power, further reflects Azerbaijan's commitment to long-term economic sustainability while addressing environmental concerns.

The place of Baku oil in the international energy market is closely tied to global energy security concerns, particularly in ensuring stable and diversified oil supplies to Europe, Asia, and other regions. Energy security, defined as the availability of reliable and affordable energy sources, has become a central issue for major economies, prompting efforts to reduce dependence on unstable regions and diversify supply routes. Azerbaijan, with its significant oil and gas reserves, has emerged as a reliable alternative energy supplier, particularly for European markets seeking to reduce reliance on Russian energy.[75] The BTC pipeline, which transports Azerbaijani crude to international markets through Turkey, exemplifies Azerbaijan's strategic role in global energy security. By bypassing Russian-controlled routes, the BTC pipeline enhances energy diversification, reducing geopolitical vulnerabilities associated with energy dependence on a single supplier.[76] Additionally, the Trans-Caspian Oil Project, which envisions linking Central Asian energy resources to European markets through Azerbaijan, has further strengthened Baku's position as a key transit hub. This initiative enhances energy connectivity between Kazakhstan, Turkmenistan, and Azerbaijan, creating an integrated energy corridor that reduces European reliance on Russian energy supplies.

75 Duhan Kalkan,"Balkanların Enerji Güvenliğinde Azerbaycan". *Journal of SDE Akademi*, 3/1 (2023): 17.

76 Abderrazzak Bekkari, "Azerbaycan Enerji Güvenliği ve Avrupa Birliği İlişkileri". *Uluslararası Ekonomik Araştırmalar Dergisi*, 9(2) (2023), 40.



Trans-Caspian International Transport Route

Beyond its role in energy security, the geopolitical and geostrategic importance of Baku oil is shaped by Azerbaijan's location at the intersection of multiple regional powers, including Russia, Turkey, Iran, and China. The Caspian region has long been a contested area for influence among these states, with Baku's oil reserves acting as a key driver of geopolitical competition.[77] Russia, historically dominant in the region, has sought to maintain its influence over Azerbaijani energy resources through economic partnerships and political ties. However, Azerbaijan has pursued a balanced energy policy, engaging with Western, Turkish, and Asian markets to assert its energy independence. Turkey, as a strategic ally, has played a crucial role in Azerbaijan's energy exports, facilitating the transport of Caspian oil to European markets through key infrastructure projects. Iran, despite its proximity and shared cultural ties with Azerbaijan, has been limited in its engagement

77 Meral Balci and Nurgul Bekar, "The Role of Renewable Energy in Uzbekistan's Strategy to Become a Regional Power" in *Sustainable and Green Energy Policies*, ed. Kürşad E. Yıldırım et al. (New York: Nova Science Publishers, 2024), 180.

due to geopolitical tensions and international sanctions. Meanwhile, China's growing energy needs have led to increased interest in Azerbaijani oil, particularly within the framework of the OBOR initiative.[78]

The One Belt One Road project, launched by China to enhance global trade connectivity, has presented new opportunities for Baku oil within the broader Eurasian energy corridor. As part of China's strategy to secure energy supplies and expand trade routes, Azerbaijan's oil infrastructure can serve as a key transit hub for energy flows between the Caspian region and East Asia. The integration of Baku oil into China's energy strategy aligns with Beijing's goal of diversifying energy imports and reducing dependency on Middle Eastern supplies. The development of new pipelines, transportation networks, and strategic partnerships under the OBOR framework could further enhance Azerbaijan's role in global energy markets. Additionally, increased cooperation with Chinese state-owned enterprises in oil exploration, refining, and investment could bolster Azerbaijan's energy sector, providing new opportunities for technological advancement and economic growth.

A key element of energy security in the South Caucasus is the growing interdependence among energy producers, transit states, and consumers. The construction of multiple oil and gas pipelines passing through Azerbaijan, Georgia, and Turkey has created a network of mutual dependency, reducing the risk of unilateral geopolitical maneuvering by global pow-

78 Serdar Yılmaz, "Bir Kuşak Bir Yol Projesinin Azerbaycan, Kazakistan ve Türkiye'ye Etkisi", *International Journal of Society Researches*, 16/32, (2020): 5279.

ers. The BTC pipeline, the Baku-Tbilisi-Erzurum gas pipeline, and the Southern Gas Corridor collectively enhance regional stability by ensuring that energy supplies remain diversified and secure. This interconnectivity limits the leverage of any single state over energy flows, fostering cooperation and reducing the risks of supply disruptions due to political conflicts.

Following the Second Karabakh War in 2020, the proposed Zangezur Corridor has emerged as a pivotal factor in regional economic development and strategic realignment. The corridor, envisioned to link mainland Azerbaijan with its Nakhchivan exclave and extend onward to Turkey through Armenian territory, promises to become a crucial artery for trade, security, and energy transmission. In scholarly discourse, its establishment is often highlighted as an opportunity not only to integrate Armenia into broader regional networks, but also to enhance the flow of goods and hydrocarbons between the Caspian and Mediterranean basins. By providing a direct route for oil and gas exports, the corridor would elevate Azerbaijan's role as a primary transit hub in the East-West energy corridor, thereby contributing to long-term regional stability and economic interdependence.

The corridor's significance is further underscored by its potential impact on Russia-Armenia and Turkey-Azerbaijan relations, as it alters longstanding geopolitical balances. For Russia, the prospect of a new transit route running through Armenian territory raises questions about the durability of its traditional sphere of influence in the South Caucasus. Meanwhile, Armenia's potential access to new markets through this corridor could diminish its reliance on Russia, fostering more balanced economic partnerships. On the Turkey-

Azerbaijan axis, the project strengthens strategic ties by creating a more direct link, reinforcing Turkey's influence in the region, and facilitating expanded commercial and infrastructural cooperation. Central to these developments are complementary railway initiatives, designed to ensure seamless transport of commodities and resources, reduce logistical costs, and create reliable overland connections that can bolster economic growth and regional connectivity. The corridor will also have the feature of connecting the Turkic world via the Trans-Caspian international trade route.



Planned Zangezur Corridor

From an energy policy perspective, the Zangezur Corridor offers Azerbaijan significant advantages. By establishing an alternate supply route to global markets, Azerbaijan can further diversify its export paths, reduce transit risks, and potentially improve bargaining leverage in energy negotiations. This diversification also aligns with broader European interests in securing stable energy supplies from the Caspian region, thus

enhancing Azerbaijan's international standing as a dependable oil and gas partner. Additionally, by facilitating commercial engagement with neighboring states, the corridor could help mitigate historical tensions, offering a framework for shared economic benefits and reinforcing Azerbaijan's reputation as a key stakeholder in shaping a more cooperative post-conflict environment.

Azerbaijan's role as a major energy supplier to Israel, particularly through the Baku-Tbilisi-Ceyhan pipeline, underscores its significance in ensuring Israel's energy security. This partnership extends beyond the mere transaction of crude oil; it reflects a broader strategic alliance that has heightened bilateral cooperation in defense, trade, and technology sectors. During the Second Karabakh War, reports indicated that Israel's military support and technology provided a tactical advantage to Azerbaijani forces, thereby illustrating how energy and security considerations can intertwine to influence regional conflicts. By diversifying its energy sources and reducing reliance on more volatile supply routes, Israel benefits from a steady flow of hydrocarbons that mitigates potential disruptions. For Azerbaijan, this relationship reinforces the country's status as a reliable energy partner and offers it an avenue to deepen international alliances, positioning Baku favorably in Middle Eastern geopolitics.

Notwithstanding its economic and political advantages, the Azerbaijan-Israel partnership also resonates within the broader context of Israel-Iran tensions. Iran, which shares a border with Azerbaijan, views Baku's close ties with Tel Aviv as an unsettling development, potentially exposing it to greater strategic vulnerabilities. The possibility of Azerbaijani territory being used

for Israeli intelligence operations or even military endeavors is a persistent concern in Tehran. Conversely, Azerbaijan remains cautious to avoid antagonizing Iran, given historical and geographic realities that necessitate a balance in external relations. This delicate interplay highlights how energy diplomacy can extend beyond economics, shaping the security architecture and diplomatic contours of the region. As a result, Azerbaijan strives to pursue a pragmatic approach that maintains fruitful energy exchanges with Israel while simultaneously managing the sensitivities of neighboring states, thereby securing its economic interests and safeguarding its own regional standing.

The future trajectory of Baku oil within global politics and energy markets will depend on the interplay of multiple factors, including shifting consumer demand, technological innovation, and evolving environmental policies. As more countries prioritize carbon-neutral goals, Azerbaijan faces growing pressure to adapt its traditional hydrocarbon sector and invest in cleaner, more sustainable energy ventures. While oil is likely to retain a considerable share in the energy mix for the foreseeable future, increased investments in natural gas, hydrogen, and other low-carbon initiatives indicate a long-term strategic transition. In this context, hydrogen energy can be considered as the most promising energy type.[79] Azerbaijan's robust engagement in the Southern Gas Corridor exemplifies a concerted effort to diversify export routes and market participation, thereby mitigating the inherent risks associated with heavy reliance

79 Ali Emre Yıldırım, Elife Beyza Kaplan, and Abdulla Khanayev. "Hydrogen-Based Energy and Turkey." *Uluslararası Afro-Avrasya Araştırmaları Dergisi* 8.15 (2023): 33.

on oil revenues.

At the same time, regional political developments, including conflicts, economic partnerships, and energy diplomacy, will impact the strategic positioning of Baku oil. The resolution of long-standing disputes in the South Caucasus, strengthened cooperation with regional allies, and the expansion of energy infrastructure will be critical in determining Azerbaijan's future role in the global energy landscape. To this end, the construction and maintenance of critical pipeline infrastructure, as well as the cultivation of favorable relations with external actors such as Russia, Turkey, the European Union, and Middle Eastern states, remain essential to securing Azerbaijan's role in the global energy landscape. The outcome of negotiations over transit corridors, energy agreements, and security pacts will have direct implications for the sustainability of Azerbaijan's energy sector, particularly as global competition for reliable energy supplies intensifies.

Against this backdrop, Azerbaijan's commitment to renewables is emerging as a strategically significant complement to its hydrocarbon industry. The country's potential for offshore wind energy in the Caspian Sea has garnered increasing attention from both the government and foreign investors, who view it as a viable means of broadening the national energy portfolio. Similarly, the liberated Karabakh region, with its favorable topographical and climatic conditions, presents opportunities for solar and wind power development. By capitalizing on[80] these natural advantages, Azerbaijan

80 Abdulla Khanayev, "Azərbaycanda Enerji Effektivliyi və Dayanıqlı İnkişaf", *Türk Dünyası Gənc Tədqiqatçılar Dərnəyinin Araşdırmaları Jurnalı*, 1/9 2024: 17.

can cultivate a more diverse energy matrix that not only reduces environmental impact but also enhances long-term economic resilience.

Moreover, the government's plans to establish a green energy corridor in collaboration with the European Union reflect a broader objective of positioning Azerbaijan as a multi-dimensional energy partner on the international stage. If successfully implemented, such a corridor could expedite the transfer of renewable electricity from the Caspian region to European markets, thereby reinforcing Azerbaijan's relevance in a future where decarbonization and energy security converge. In parallel, this initiative can facilitate closer political and economic ties with the EU, supporting regional integration and expanding the country's network of reliable trade partners.



Planned Green Energy Corridor

In tandem with these renewable endeavors, Azerbaijan is likely to maintain a careful balance in its

oil policies, striving to accommodate global decarbonization objectives while preserving the revenue streams needed to sustain domestic development programs. Future strategies may include continued investment in advanced extraction techniques, prudent management of oil fund reserves, and the pursuit of collaborative projects that underscore Azerbaijan's commitment to environmental stewardship. Through a combination of diversified energy exports, technological innovation, and active participation in regional cooperation efforts, the country can strengthen its status as both a dependable hydrocarbon producer and an emerging leader in the transition toward cleaner energy sources.

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