Three Key Factors Reducing Oil Revenues in Azerbaijan

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Abstract

The year 2024 presents significant challenges for Azerbaijan's oil and gas industry, indispensable in generating income and attracting investments for the independent Azerbaijani economy. The reduction in oil production (1), the increase in operational and transportation costs (2), and the relative decrease in global market prices (3) contribute to the decline in oil and gas revenues. This article explores the reasons for the declining resource revenues in Azerbaijan in recent years and assesses the current situation based on the factors above.

Keywords: Azerbaijan, oil, gas, production cost, operational cost, transportation cost, oil price, revenue

Introduction

First, it should be noted that Azerbaijan's energy resources are primarily destined for the European market. Azerbaijan's oil and gas pipelines target European markets via Georgia and Turkey. According to EuroStat[1], Azerbaijan exported energy resources worth over 188 billion euros to the European Union (EU) markets in 2023. Two-thirds (65%) of this amount, or 124 million barrels, were derived from the sale of crude oil in European markets. Although the volume of crude oil exported to the EU from Azerbaijan increased by 26% compared to 2022, revenues from exports decreased by 18%. A third (35%) of Azerbaijan's income from the EU is composed of natural gas. In the previous year, Azerbaijan's revenues from gas supplies to the EU amounted to 62 billion euros, 25 times less than in 2022. Despite a 174-fold increase in the volume of oil products exported to the EU compared to 2022, revenues from oil product exports amounted to 186 million euros last year.

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[1] https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Energy_statistics_-_an_overview

In 2023, Azerbaijan became the tenth largest trading partner for crude oil imports in Europe, selling 203 million tons of crude oil and earning 13,4 billion dollars from this trade, largely supported by trade with Italy.

1) The reduction in oil production

The indicators of oil industry[2] is presented in Table 1.

Table 1. Azerbaijan oil industry

	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Oil: Production in thousands of barrels per day	878	851	841	828	782	784	763	703	708	669	620
Oil: Production in million tonnes	43.5	42.1	41.7	41.1	38.7	38.8	37.6	34.6	34.6	32.7	30.2
Oil: Consumption in thousands of barrels per day	101	100	100	99	100	114	115	105	120	126	130
Oil: Refining capacity, Thousand barrels daily	325	325	325	325	205	163	120	120	135	150	150

Source: Energy İnstitute, SOCAR

Currently, Azerbaijan supplies 5% of the EU market's demand for oil and gas separately[3]. In addition to Italy, Azerbaijan's main trading partners in the European market are Germany, Spain, France, Greece, Croatia, the Czech Republic, Austria, and Portugal.

[2] https://www.energyinst.org/__data/assets/pdf_file/0004/1055542/EI_Stat_Review_PDF_single_3.pdf

[3] https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Energy_statistics_-_an_overview

In 2023, Azerbaijan exported 26,047,289.51 tons of oil, worth $16,240,829,000, to 22 countries. The list of countries where the exported crude oil was finalized at customs last year is presented in Table 2.

Table 2. Countries to which Azerbaijan exported crude oil[4]

No	Country	Statistical Value (Million USD)	Quantity (tons)	Price per ton (USD)
1	Italy	7,077.11	11,117,529.86	6,365
2	Israel	1,394.27	2,270,342.65	6,141
3	India	1,227.04	2,025,082.15	6,059
4	Germany	871.93	1,341,018.14	6,502
5	Spain	769.59	1,221,974.82	6,298
6	Czech Republic	682.89	1,135,964.61	6,011
7	Turkey	676.31	1,202,207.86	5,625
8	Croatia	590.40	975,165.93	6,054
9	Greece	455.31	743,513.50	6,123
10	United Kingdom	432.28	691,038.87	6,255
11	Romania	382.76	621,947.79	6,154
12	Ireland	366.64	630,056.20	5,819
13	Vietnam	345.49	554,367.23	6,346
14	Portugal	299.58	449,879.31	5,993
15	Austria	152.16	266,568.71	5,708
16	Indonesia	150.21	221,084.92	6,794
17	France	118.64	199,006.72	5,961
18	Singapore	87.79	138,338.45	6,345
19	Tunisia	71.94	106,274.64	6,769
20	Malaysia	34.01	48,042.55	7,079
21	Australia	28.39	39,196.58	7,243
22	Thailand	26.10	48,688.02	5,360
–	Total	16,240.83	26,047,289.51	6,235

[4] https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Energy_statistics_-_an_overview

Source: State Customs Committee of the Republic of Azerbaijan

As seen in the table, last year, Azerbaijan exported 34% of its total crude oil exports to Italy, amounting to 7,077,115.41 thousand USD worth of 11,117,529.86 tons of oil. Thus, Italy ranked first in Azerbaijan's total oil exports and overall trade turnover. Israel ranked second in crude oil exports by volume and value, with exports worth 1,394,267.62 thousand USD of 2,270,342.62 tons of oil. India holds the third position in Azerbaijan's oil export list. Last year, 1,227,040.85 thousand USD worth of 2,025,082.15 tons of oil was exported to this country. Germany and Spain were Azerbaijan's fourth and fifth partners in this trade.

Regarding prices, Thailand leads the list of countries that purchase cheap oil from Azerbaijan, with 1 ton costing 536 USD. The subsequent countries are Turkey (5,625 USD per ton), Austria (5,708 USD per ton), Ireland (5,819 USD per ton), Portugal (5,993 USD per ton), Czech Republic (6,011 USD per ton), Croatia (6,054 USD per ton), India (6,059 USD per ton), and Greece (6,123 USD per ton). Israel completes the top ten with a price of 6,141 USD per ton.

Thus, the peak of Azerbaijan's oil revenues was recorded in 2011 when the State Oil Fund of the Republic of Azerbaijan (SOFAZ) received 198 billion USD from the sale of profit oil and gas. In 2022, SOFAZ's revenues from profit oil and gas sales amounted to 115 billion USD. In 2023, revenues from the sale of profit oil and gas to SOFAZ amounted to 85 billion USD[5]. As for the current year, budgeted revenues from this source for 2024 are projected to be 48 billion USD[6].

According to the income and expenditure data of SOFAZ for January-June 2024, SOFAZ's revenues related to the implementation of oil and gas agreements during the reporting period amounted to 3.78 billion USD, including 3.32 billion USD from the sale of profit oil and gas, 45.64 million USD from bonus payments, 0.176 million USD from transit revenues, and 2.11 million USD from acreage fees[7].

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[5] **https://sai.gov.az/files/2.1.%20Yeni%20T.%20Auditor%20Hesabat%C4%B1%20NF%202024._last-985435967.pdf**

[6] https://sai.gov.az/files/DNF_rey_2024-327854839.pdf

[7] https://oilfund.az/fund/press-room/news-archive/1649

According to SOFAZ's latest statement for January-July this year[8], Azerbaijan has earned 3,607.7 million USD from the ACG field (Azeri-Chirag-Guneshli) and 364.465 million USD from the Shah Deniz field (gas and condensate) under the production sharing agreement. For comparison, during the same period last year, profit from the ACG field was 4,158 million USD, and profit from the Shah Deniz field (gas and condensate) was 1,141 million USD[9].

As can be seen, Azerbaijan's oil and gas revenues are rapidly declining. The main factor leading to the decrease in oil revenues in Azerbaijan is the decline in production, while the decrease in gas revenues is due to falling prices.

Although the 30-year production sharing agreement signed in 1994 for the "Azeri-Chirag-Guneshli" (ACG) field expired this year, the project's duration was extended until 2050 on September 14, 2017. Thanks to the ACG field, oil production in Azerbaijan increased 5.6 times from 9 million tons, the lowest level in history in 1997, to 50.8 million tons in 2010.

Throughout 2023, the country produced 30.2 million tons of oil (including condensate). Of this oil production, 17.8 million tons were from the "Azeri-Chirag-Guneshli" field, 4.3 million tons (condensate) from "Shah Deniz," and 0.3 million tons (condensate) from the "Absheron" field. The oil production (including condensate) by SOCAR amounted to 7.8 million tons. During this period, 25.2 million tons of oil (including condensate) were transported for export, of which 22.1 million tons belonged to the consortium and 3.1 million tons to SOCAR[10].

Compared to 2010, commodity oil production in Azerbaijan decreased by over 206 million tons, or more than 15 times, to 32.2 million tons, directly linked to the reduction in oil production in projects implemented with foreign companies. While the country's oil production was 44.6 million tons in 2013, this figure dropped to 32.2 million tons in

[8] https://oilfund.az/fund/press-room/news-archive/1654
[9] https://oilfund.az/fund/press-room/news-archive/1598
[10] Ibadoghlu, Gubad and Bayramli, Emin, Could the economy of Azerbaijan fall into the middle-income trap? (June 19, 2024). Available at SSRN: https://ssrn.com/abstract=4870534 or http://dx.doi.org/10.2139/ssrn.4870534

2023, marking the lowest recorded figure in the reporting period. The peak oil production during the reporting period was 50.8 million tons, recorded in 2010.

According to estimates, oil production in projects implemented with foreign companies decreased by 11.5 million tons, or 32.1%, over the past ten years. Specifically, oil production in these activities decreased from 35.9 million tons in 2013 to 24.4 million tons in 2023.

During the 20-year reporting period for the ACG field, the highest production was 30.0 million barrels in 2010. There were also sharp declines in ACG's oil production, with reductions of 3.8 million barrels in 2011, 1.6 million barrels in 2017, 2.0 million barrels in 2020, and 1.9 million barrels in 2023 compared to the previous year. The oil production indicator for ACG in 2023 represented 44.5% of the peak production in 2010, with a decline of 10.0 million barrels and 43% compared to 2014. The sharp decline in production from the ACG field has been observed since 2018, and it is expected to continue until 2025. Production is anticipated to stabilize at an annual level of 11.9 million tons between 2025 and 2027[11].

Currently, the "Azeri Central East" (ACE) platform is being constructed to stabilize production at ACG. The ACE project, worth approximately 7 billion USD, is the next phase of the development of the giant ACG field in the Caspian Sea. The project includes a new offshore platform and other facilities with a production capacity of up to 100,000 barrels per day. It is projected that a total of up to 30.0 million barrels of oil will be produced during the project's operation.

The drilling of the first production well at the ACE platform began on December 4, 2023, and the first oil from this well was extracted in March 2024. BP Vice President B. Aslanbeyli stated that "the ACE project will have a positive impact on slowing the decline in oil production rates from ACG." [12]

For information, oil production from the ACG block in 2023 decreased by 12.5% compared to 2022, amounting to approximately 13.3 million barrels (1.8 million tons).

[11] https://minenergy.gov.az/az/xeberler-arxivi/00146_7892

[12] https://interfax.az/view/910007/az

Additionally, the decline in oil production across the country is also affected by the decline in SOCAR's production. The company's production decreased by 0.9 million tons, or 10.3%, from 8.7 million tons to 7.8 million tons between 2008 and 2023[13].

As can be seen, Azerbaijan is trying to stabilize oil production and reduce its sharp decline by creating new production areas in this field through new investments. The ACE platform leads this list. However, forecasts suggest that the oil era in Azerbaijan will soon end. While the country's daily production exceeded 1 million barrels in 2009 and 2010, it is now below 500,000 barrels. On the other hand, after the commitment at COP28 to gradually reduce fossil fuel consumption, it has become difficult to increase production in the traditional energy sector and attract new investors and creditors[14]. Even the report presented to the Fifth Republic government by the French Senate demands "the suspension of new projects and new phases of ongoing projects involving French companies in Azerbaijan's hydrocarbon sector."[15]

Azerbaijan is making strategic moves to diversify its oil exports by country. This year, Uzbekistan, Poland, Serbia, and the Netherlands have joined the list of countries purchasing oil and oil products from Azerbaijan. Simultaneously, Azerbaijan has ceased selling to the Southeast Asian market, including Singapore, Vietnam, Malaysia, and distant Australia, and the European market, including Austria and Ireland.

2) The increase in operational and transportation costs

Although the decrease in oil production in Azerbaijan since 2012 is often attributed to natural processes, it is not the only factor reducing the country's resource revenues. One of the factors contributing to the reduction in resource revenues is the increase in transportation, operational costs, and capital expenditures. The rise in these costs is linked not only to the profitability of project execution but also to the significant impact

[13] https://socar.az/az/page/hasilat-hesabat

[14] Ibadoghlu, Gubad and Bayramova, Zhala, Challenges and Opportunities Created by COP29 for Azerbaijan (June 25, 2024). Available at SSRN: https://ssrn.com/abstract=4876642 or http://dx.doi.org/10.2139/ssrn.4876642

[15] https://caspianbarrel.org/en/2024/06/the-french-senate-is-against-the-activities-of-total-energies-in-azerbaijan/

of global inflation indicators influenced by the COVID-19 pandemic and post-pandemic processes, which have reshaped the economic landscape.

Since September 20, 1994, the Azeri-Chirag-Guneshli (ACG) field has been a cornerstone of Azerbaijan's oil and gas sector. The initial cost of the Production Sharing Agreement (PSA) for ACG was announced as $7.4 billion, but by the end of the third quarter of 2023, more than $43 billion had been invested. The actual costs of ACG under the PSA have exceeded initial costs by more than 5.8 times before the completion of 30 years. From the signing of the first ACG PSA in 1994 until 2013, approximately $51.6 billion was invested in Azerbaijan's oil and gas sector. The 'Azeri-Chirag-Guneshli' project has been a significant revenue generator, contributing $152.8 billion to date.

As of July 1, 2024, over 4.4 billion barrels (581 million tons) of oil have been produced from the ACG field. The oil is transported to global markets via the Baku-Tbilisi-Ceyhan (BTC) and Western Export Pipelines. The daily throughput capacity of these pipelines is 1.2 million barrels.

The operator of the ACG project on behalf of the contractor parties is BP Exploration (Caspian Sea) Limited. The peak oil production from the ACG block in the Caspian Sea was recorded in 2010, with a daily production of 823,100 barrels. By mid-2024, production had decreased by 2.45 times to 336,000 barrels per day.

On September 14, 2017, an amendment was made to the agreement for the joint development of the “Azeri,” “Chirag,” and “Guneshli” fields in the Azerbaijani sector of the Caspian Sea, and a revised agreement was signed[16]. Under this agreement, SOCAR’s share in ACG increased from 11.65% to 25%, and it's worth noting that international partner companies have committed to paying a substantial $3.6 billion bonus to the State Oil Fund. There is potential for over $40 billion in investment in ACG over the next 31

[16] https://www.bp.com/content/dam/bp/country-sites/en_az/azerbaijan/home/pdfs/legalagreements/psas/ea-az-restated-acg-psa.pdf

years. This was the first significant investment decision by ACG partners following the extension of the PSA until 2049.

In the first quarter of 2024, approximately $115 million was spent on operational costs and $347 million on capital expenditures for ACG. During the first three months of 2024, total production from ACG was 339,000 barrels or approximately 31 million barrels (4 million tons). The cost to produce one barrel of oil at ACG in the first quarter of 2024 was $3.97, compared to $1.42 per barrel during peak production.

In 2010, with 58 production wells and daily oil production of 823,100 barrels, operational costs were $426 million. By 2023, with 137 production wells and daily oil production of 363,000 barrels, operational costs had risen to $504 million. Last year, operational costs at ACG increased by more than 7%. According to BP's report[17] on its activities in Azerbaijan for the first half of this year, approximately $243 million was spent on operational costs and more than $698 million on capital expenditures for the ACG block.

According to the report, by the end of June 2024, 144 oil production wells, 45 water injector wells, and eight gas injector wells were operating at ACG. The stability of ACG's production, which continued to be safe and reliable, is a testament to our operational excellence. For the first six months, the average daily output from ACG was 336,000 barrels, or approximately 61 million barrels (8 million tons).

As seen, in 2010, $426 million was spent on operational costs for producing 50.8 million tons of oil ($8.38 per ton), whereas in the first half of 2024, $243 million was spent for 8 million tons of oil ($30.37 per ton). This significant 3.62-fold increase in operational costs during this period underscores the urgent need for cost management.

Additionally, according to the report, BP spent $758.7 million on direct costs for local labor and materials in Azerbaijan, Georgia, and Turkey for the first half of this year, marking a 5.6% annual increase. BP also spent $332.5 million within joint ventures (14

[17] https://www.bp.com/content/dam/bp/country-sites/en_az/azerbaijan/home/pdfs/business-updates/1H%202024%20results.pdf

companies) and $183.6 million on foreign contractors (77 companies). BP's expenditures on small and medium enterprises were $220.8 million, and on state companies, $21.8 million.

In recent years, there has been an increase in the costs of transporting Azerbaijani oil to global markets. This is attributed to higher transit fees and increased operational and capital expenditures for the BTC pipeline. According to BP's report, consortium members spent $166 million on BTC last year, including $120 million on operational measures and $46 million on capital expenditures. Last year, 30 million tons (approximately 227 million barrels) of crude oil and condensate were transported via BTC to the terminal in Ceyhan, Turkey, indicating that 52% of BTC's throughput capacity was utilized.

In the first half of 2024, total BTC expenditures were $88.2 million, including $70.5 million in operational costs and $17.7 million in capital expenditures. This reflects an increase in overall BTC costs compared to the same period last year.

Thus, when oil production in Azerbaijan declines, production and transportation costs continually rise, reducing revenue from resource exports.

3) Decrease in global market prices

Another factor to consider is the role of prices in forming resource revenues in Azerbaijan. According to the "Audit of the Formation and Use of the State Oil Fund of the Republic of Azerbaijan's Funds for 2023"[18], profit from oil and gas sales exceeded forecasts by 2.753 billion manat due to the oil price being $23.4 above the forecast. For reference, the average export price of Azerbaijani oil peaked at $111.1 per barrel in 2011. The lowest prices in recent years were $41.2 in 2020 and $54.3 in 2015. In 2022, the average export price was $101.1 per barrel, and in 2023, $86.1 per barrel. The lowest price for "Azeri Light" oil was recorded at $15.81 per barrel on April 21, 2020, and the highest at $149.66 per barrel in July 2008. For the current year, the price of "Azeri Light" oil averaged

[18] https://sai.gov.az/files/2.1.%20Yeni%20T.%20Auditor%20Hesabat%C4%B1%20NF%202024._last-985435967.pdf

$86 per barrel over the first five months. Based on this, the Finance Ministry has set the oil price at $75 per barrel[19] in the revised budget for this year.

In the second half of 2024, global oil prices are expected to decline, which will further reduce Azerbaijan's oil export revenues. Projections suggest that global oil prices will continue to decrease starting in 2026. The victory of the Republican candidate Donald Trump in the U.S. presidential election in November could further accelerate the decline in residual fuel prices.[20]

In conclusion, even if oil prices remain at their current levels in the global market, they will not significantly reduce Azerbaijan's resource revenues. This is because, alongside declining oil production, the rising production and transportation costs are more influential factors in reducing revenues from this resource.

[19] https://www.maliyye.gov.az/scripts/pdfjs/web/viewer.html?file=/uploads/static-pages/files/65426bc58efc7.pdf

[20] Ibadoghlu, Gubad, U.S. Presidential Elections: Which Party's Leadership is More Favorable for Azerbaijan? (July 28, 2024). Available at SSRN: https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4908188