Tengiz Effect – 2033 and beyond

Introduction

The Tengizchevroil [TCO] project stands as a cornerstone of Kazakhstan's oil industry, representing a significant portion of the country's crude oil production and reserves. As a pioneer of stabilized contracts in Kazakhstan, TCO's concession is nearing its end in 2033, necessitating a strategic approach to establish a new balance of interests that benefits both the Republic of Kazakhstan and the shareholders. The project's technical complexity and capital intensity underscore its importance to the national economy, making it crucial to negotiate terms that are advantageous for Kazakhstan while remaining acceptable to investors.

The TCO project is not just an oil field; it is a symbol of Kazakhstan's economic aspirations and its integration into the global energy market. This project has essentially become the cornerstone of economic legitimacy for a newly independent Kazakhstan. The involvement of major international investors demonstrated global business confidence in our country's long-term potential. The project's success has been built on a foundation of international cooperation, technological innovation, and strategic foresight. As the end of the current concession approaches, Kazakhstan faces the challenge of renegotiating terms that will continue to attract foreign investment while maximizing the benefits for its economy. This delicate balance requires a nuanced understanding of both the global oil market and the specific needs of the Kazakhstani economy.

About TCO and its footprint in Kazakhstan

Tengizchevroil is a joint venture established in 1993 to manage the development and operation of the Tengiz oil field, one of the world's largest and deepest oil fields, located in the southern Pre-Caspian basin of Kazakhstan. The venture is a collaboration between Chevron [holding a 50% stake], ExxonMobil [25%], KazMunayGaz [20%], and Lukoil [5%].

TCO operates the Tengiz and Korolevskoye fields, which together hold estimated recoverable crude oil reserves of 936 million tons [approximately 7.48 billion barrels using a conversion factor of 7.98 barrels per ton] as of the end of 2022, representing 21% of the total recoverable oil reserves in Kazakhstan. Additionally, the fields contain 469 billion cubic meters of gas [approximately 16.57 trillion cubic feet using a conversion factor of 35.35 cubic feet per cubic meter], accounting for 12% of the total recoverable gas reserves in Kazakhstan.

TCO plays a vital role for Kazakhstan's economy. As we have mentioned in one of our previous articles, "Crude Oil – Upward Trend", the company is by far the largest player in the oil industry as it produces around one-third of the country's total crude oil output. Since its inception as a joint venture, the company has produced 561 million tons of oil between 1993 and 2023, which accounts for 29% of the country's total oil production over the same period. Since TCO invests heavily in expanding its production capacity, its importance for Kazakhstan's economy is poised to remain very high for the next decade. As a result of these efforts, TCO is poised to solidify its dominance in Kazakhstan's oil industry, with its share of the country's total oil output projected to expand to 43% by 2033 when current concession for Tengiz expires. To that date recoverable oil reserves of Tengiz and Korolevskoye fields still vast 534 million tons. TCO also boasts a significant footprint in Kazakhstan's natural gas production, which we mentioned in our "Natural Gas – Kazakhstan's Great Expectations" article. TCO's impact on Kazakhstan is difficult to overestimate. The project fueled the creation of crucial infrastructure facilities such as the CPC pipeline, and it will continue to be the foundation for the development of Kazakhstan's economy in the future, including initiatives like chemical gas projects.

	Projection (current concession expires in 2033)		
Description	**2024, mln tons**	**2033, mln tons**	**2035, mln tons**
TCO's oil output	29.0	39.9	36.3
Kazakhstan's oil output	89.6	91.9	81.7
TCO's share	**32%**	**43%**	**44%**

Source: Compiled based on data from Analytical platform EXia

According to TCO's FY2023 financial statements, crude oil is the major revenue stream that contributed around 97% to total sales. The company's FY 2023 revenue contributed around 7% to the country's GDP. TCO's oil is exported via the Caspian Pipeline Consortium [CPC], which has undergone several debottlenecking projects to increase its capacity to accommodate future production increases.

Tengizchevroil LLP
Notes to the Summary Financial Statements (continued)

3. Crude Oil and Other Product Revenue

	2023 US $000	**2022 US $000**	**2021 US $000**
Crude Oil			
Pipeline	18,658,382	22,473,725	14,704,074
Rail	-	3,176	-
Total Crude Oil Revenue	**18,658,382**	**22,476,901**	**14,704,074**
Other Products			
LPG	410,389	542,492	749,115
Sulfur	203,519	458,302	358,528
Natural Gas	16,003	317,120	114,858
Total Other Products Revenue	**629,911**	**1,317,914**	**1,222,501**
Total Crude Oil and Other Products Revenue	**19,288,293**	**23,794,815**	**15,926,575**

Source: TCO's FY2023 audited financial statements

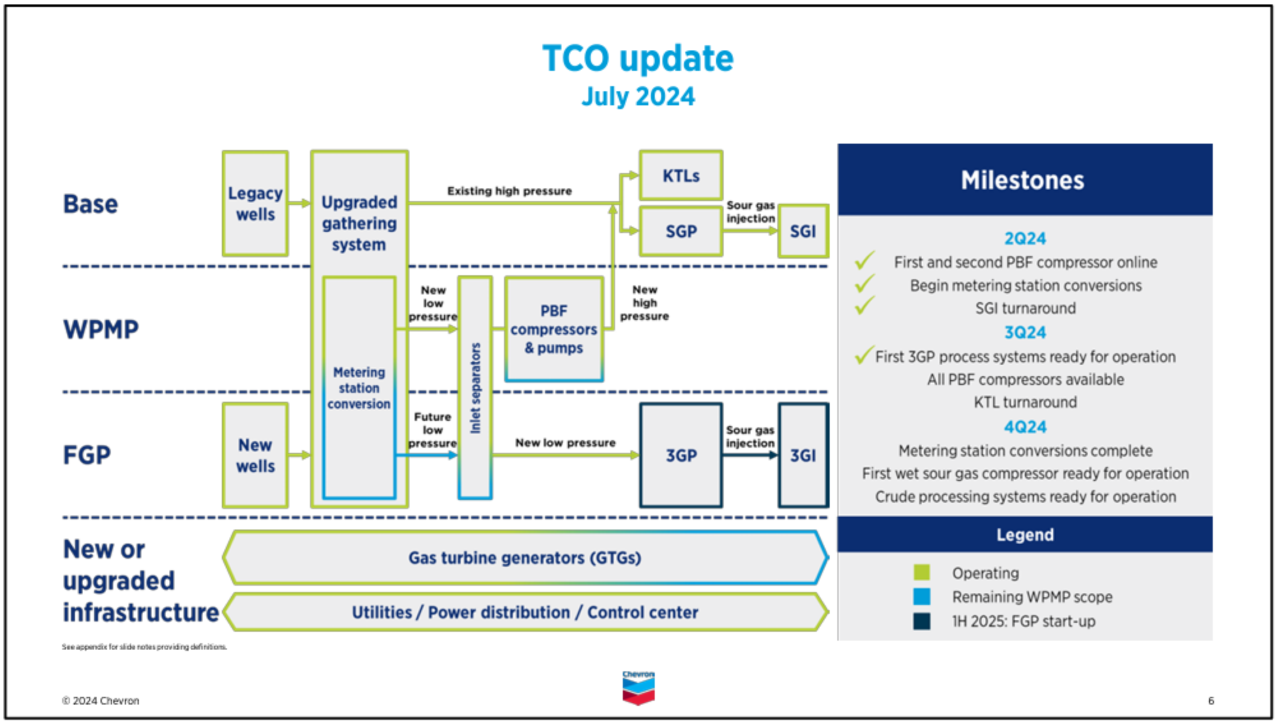
According to the company’s website, direct financial benefits for Kazakhstan since 1993 totaled $196 billion. The note from the company suggests that this amount includes Kazakhstani employees' salaries, purchases of Kazakhstani goods and services, tariffs and fees paid to state-owned companies, profit distributions to Kazakhstani shareholder and taxes and royalties paid to the government. We will explore TCO's taxation in greater detail later in our article.

The Tengiz Field and FGP/WPMP project

The Tengiz field, discovered in 1979, is notable for its challenging geological conditions, including high temperatures, abnormal reservoir pressures, and high hydrogen sulfide content. Since its inception, TCO has implemented various projects to enhance production capacity and manage complex subsurface conditions, including the Sour Gas Injection and Second-Generation Plant projects. The field's depth and pressure present unique challenges that require cutting-edge technology and expertise.

The Future Growth Project – Wellhead Pressure Management Project [FGP/WPMP] is a major expansion initiative with a total investment of approximately $46.7 billion. This project is expected to increase TCO's production by 12 million tons annually, reaching a total of 39 million tons per year. The FGP/WPMP project represents a significant investment in the future of Kazakhstan's oil industry. By significantly increasing production capacity, the project aims to secure Kazakhstan's position as a leading oil producer in the region. The challenges faced by the project in its early stages, including delays and cost overruns, highlight the complexities of managing large-scale industrial projects in a rapidly changing global environment. However, the potential benefits of the project, both in terms of increased production and economic growth, make it a vital component of Kazakhstan's long-term energy strategy. Moreover, recent developments around the project are quite optimistic.

According to the information as of April 25, 2024, TCO has successfully initiated operations at its WPMP facilities. This milestone involves the conversion of the first metering station to low pressure and the activation of the associated Pressure Boost Facility [PBF]. The WPMP is a crucial component of TCO's broader expansion efforts at Tengiz, aimed at maintaining the processing plants' full capacity of approximately 28 million tons per annum. This is achieved by reducing the flowing pressure at the wellheads and subsequently boosting it to the existing plants. The startup of additional PBF compressors and the conversion of remaining metering stations are planned to continue throughout the year.



Source: Chevron's fiscal Q2 2024 earnings call presentation

During Chevron's latest earnings call, the management reiterated its cost and schedule guidance for the FGP project. According to the above slide from Chevron, the FGP is expected to start up in the first half of 2025. According to the latest official release from TCO as of September 3, it has successfully completed planned turnaround maintenance at the Complex Technological Lines [KTL] plant located at the Tengiz oil field. Moreover, Chevron's management has also emphasized that WPMP is "operating very reliably" and that they are pleased with the performance of the equipment.

TCO and The Government Take

As we mentioned above, the company claims that direct financial benefits for Kazakhstan since TCO's inception totaled almost $200 billion. The amount is massive, but we believe that any figure becomes more valuable when we add more context and add more forward-looking analysis by simulating various scenarios for the future.

Before we simulate scenarios, let us briefly recap some crucial details about TCO's tax regime. The fiscal regime for TCO includes two types of royalties and a corporate income tax [CIT] of 30%. According to TCO's FY 2022 financial statements, there are Base Royalty and Incremental Royalty.

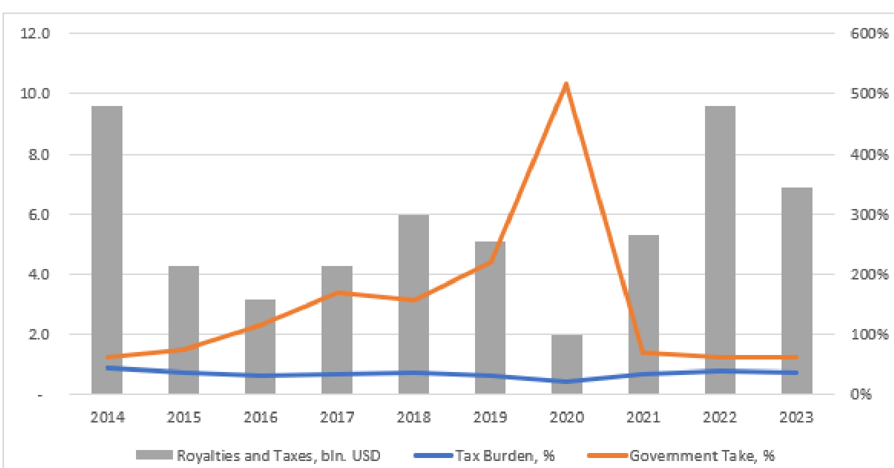
Base Royalty is calculated at the rate of 25% on the Dollar Value Equivalent, as defined in the Partnership Agreements as revenue from crude oil and other product sales after deducting transportation and marketing expenses, all non-well operating costs and depreciation of non-well facilities using a five-year straight-line depreciation method.

Incremental Royalty is calculated at the rate of 15% on the Net Cash Position as defined in the Partnership Agreements. In accordance with the Partnership Agreements, Net VAT [as defined in the Partnership Agreements] and certain taxes, fees, duties and government exactions in excess of the amounts prescribed in the Partnership Agreements [known as Applicable Taxes] are offset against Royalty Payable and can also be offset against Income Tax, if necessary.

The fiscal regime governing relationships between the country and TCO is designed to balance the interests of the Kazakhstani government and the international investors involved in the project. By tying royalties to production and export revenues, the regime ensures that the government benefits from the field's success while providing incentives for continued investment and production. CIT further aligns the interests of the government and investors, ensuring that both parties share in the project's success.

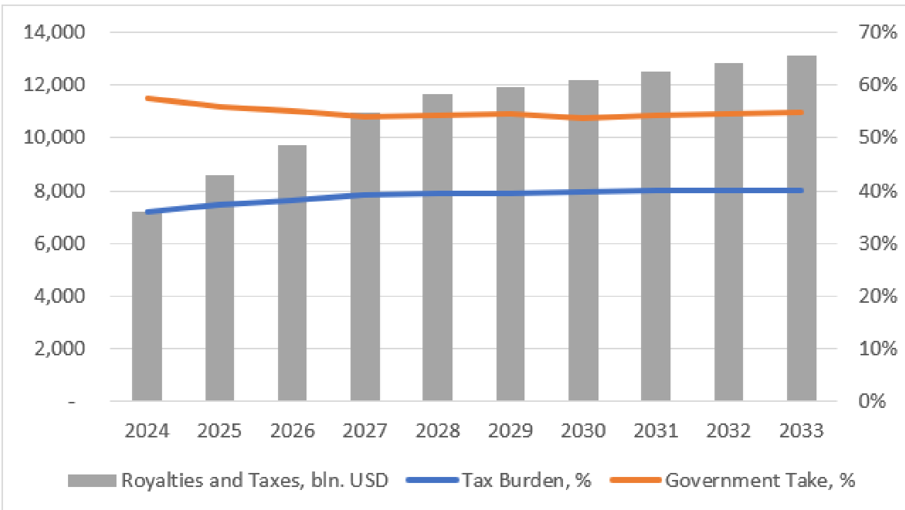
Looking at historical trends is also crucial to better understand context. Therefore, let us examine the trend of Kazakhstan's cash inflows from TCO over the past decade. Two key metrics provide valuable insights: Tax Burden and Government Take. Tax Burden is calculated as the sum of royalties and taxes divided by revenue, while Government Take is the sum of royalties and taxes divided by the divisible cash flow (Revenue – OpEx - CapEx).

The chart below underscores the high sensitivity of total royalties and taxes to crude oil prices, with the highest levels observed in 2014 and 2022. The period between 2015 and 2021 saw much lower average crude oil prices, resulting in significantly lower royalties and taxes. The Government Take grew exponentially between 2015 and 2020 due to a dip in divisible cash flow caused by lower crude oil prices, and this adverse effect was exacerbated by heavy capital spending on the FGP/WPMP project.



Source: Compiled by ENERGY Insight & Analytics

Since the FGP/WPMP project aims to significantly increase TCO's oil production levels, we can expect robust growth in total royalties and taxes over the next decade. If the company achieves an oil production level of around 40 million tons per year by 2028, and crude oil prices remain within the $90-$100 per barrel range, the Government Take is likely to reach approximately 55%. The chart below outlines the projected inflows from TCO between 2024 and 2033.

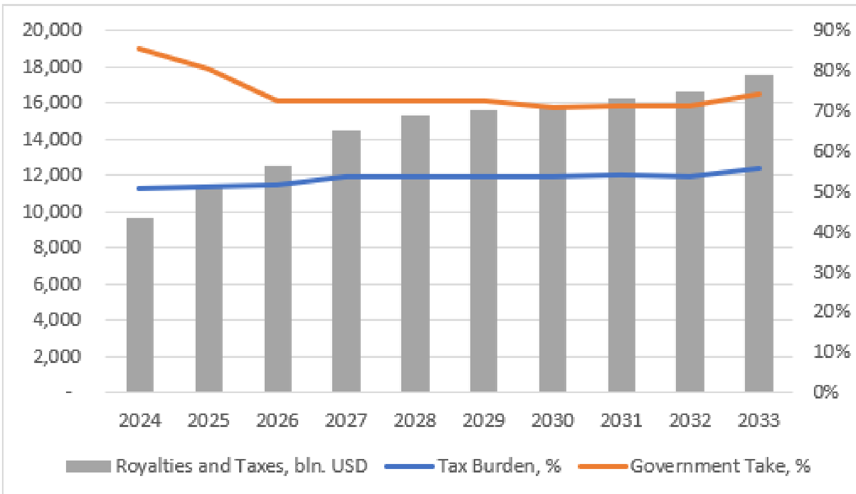


Source: Compiled by ENERGY Insight & Analytics

The above model's horizon ends in 2033, which is termination year of TCO's concession for Tengiz field. It is extremely unlikely that there will be changes made to the fiscal regime until the current concession expires. The expiration is almost a decade away, but the question is already vital both for our country and TCO's investors beyond KazMunaiGas. For example, during Chevron's latest earnings call, Neil Mehta from Goldman Sachs addressed a question about Tengiz concession extension to Chevron's management. This underscores the importance of this issue for the U.S. oil giants as well.

The extension of the concession is likely to offer Kazakhstan opportunities to negotiate more favorable economic terms. As an emerging nation, Kazakhstan's political institutions are evolving towards more democratic practices, which is likely to reduce risks for foreign investors. If the country maintains this trajectory, it will likely be in a stronger position to negotiate terms for the Tengiz concession compared to previous rounds. Although the level of uncertainty remains high, we propose conducting an exercise to estimate the potential government revenue from TCO if it operates under the General tax regime for oil producers.

The chart below outlines how the Tax Burden and Government Take dynamics might behave over the next decade if (theoretically) the General tax regime is applied to TCO. A Tax Burden above 50% and a Government Take above 70% are unlikely to be economically viable for investors. Such high values are due to unsuitable Mineral Extraction Tax's scale for mega oil fields like Tengiz. For example, the actual Tax Burden for 2023 for companies working under the general tax regime assessed for 37%. Moreover, Tengiz is a unique oil field with a wide array of technological challenges and risks, requiring deep expertise and substantial investments to maintain and develop its potential. Therefore, negotiating royalties and taxation terms for the concession after 2033 should balance investors' interests, aiming to achieve a 'Golden Middle' between TCO's current and general tax regimes.



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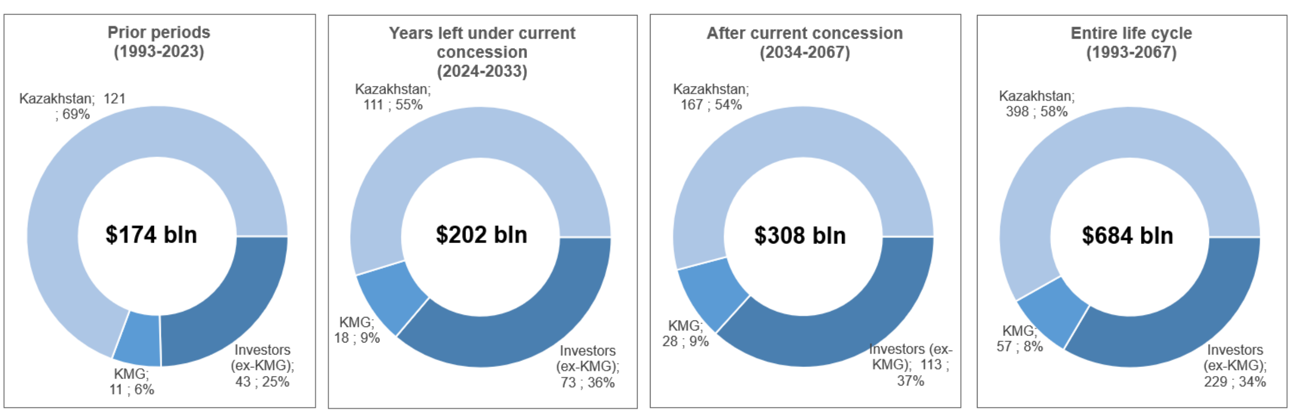
Source: Compiled by ENERGY Insight & Analytics

We understand that the favorable tax regime has been instrumental in attracting and retaining foreign investment, ensuring that the Tengiz field continues to contribute to Kazakhstan's economic growth. However, we believe that simulating different scenarios will help in finding the balance between the interests of TCO's foreign investors and our country's.

Negotiations between Kazakhstan and investors regarding the terms and conditions for the new concession effective after 2033 are a vital strategic topic for our country, with significant economic implications for the coming decades. The FGP/WPMP project is likely to enhance future benefits for Kazakhstan and KazMunayGaz [KMG] compared to previous periods.



Source: Compiled by ENERGY Insight & Analytics

The historical tax contributions of TCO underscore its importance to Kazakhstan's economy. As the largest taxpayer in the country, TCO plays a critical role in funding government programs and services. As the end of the current concession approaches, it is essential to maintain a fiscal environment that supports continued investment and production.

Bottom line

The future of the Tengizchevroil project is critical to Kazakhstan's economic and strategic interests. By negotiating a new contract that balances the interests of the government and investors, Kazakhstan can ensure that the Tengiz field continues to contribute to its economic growth and development. The success of the project will depend on the ability of all parties to work together to address the challenges and opportunities that lie ahead, ensuring that the benefits of the Tengiz field are shared equitably and sustainably.

ENERGY Insights & Analytics

Analytical center "ENERGY" LLP (ENERGY Insight & Analytics) is a joint venture between the KAZENERGY Association and IT company AppStream. The company aims to become a priority source of data, analytical information, and recommendations for Kazakhstan's oil, gas, and electric power industries, allowing decision-makers to analyze and predict the most significant industry indicators with details on leading market players. Activities of ENERGY Insight & Analytics incorporate the whole analytics cycle with consequent stages: Descriptive, Diagnostic, Predictive, and Prescriptive analytics.

The key tool and product of ENERGY Insight & Analytics is internally developed software - the Analytical Platform EXia, aimed to identify, localize, format, and present data most efficiently for the specified use cases in a kind of Software-as-a-Service.