

# Investment Potential 2025 – Oil Production in Kazakhstan

## Introduction

ENERGY Insights & Analytics initiated its own assessment of Kazakhstan's upstream industry investment potential last year through <u>a comprehensive analysis of key performance metrics</u> from the country's largest crude oil producers and a fair value calculation for the entire sector. With evolving market conditions and updated data now available, it is time to update our analysis and refine the key assumptions underpinning our valuation.

There are approximately a hundred oil-producing companies in Kazakhstan, each with its own characteristics and development potential. ENERGY Insights & Analytics has analyzed and compared the actual performance of the largest oil-producing companies and assessed their investment potential using NPV, a key metric that indicates "how much money is in the industry".

For this analysis, investment potential is understood as an oil-producing company's and its shareholders' ability to invest in sustaining the company's operations and future development.

In our view, the best measure of investment potential is Net Present Value (NPV), which represents the sum of discounted net cash flows. Net cash flows account for taxes, mandatory payments, and investments. The discount rate, in turn, incorporates the cost of equity and debt financing. Thus, NPV reflects the amount of capital shareholders can allocate to new projects, including those in the oil and gas industry. Consequently, the higher the positive NPV, the greater the investment potential.

High investment potential converts to high investment attractiveness, as capital owners are more inclined to invest in a particular enterprise or industry.

Using a bottom-up approach, the NPV is calculated for Kazakhstan's fifteen largest oil and gas companies (refer to the "Selection of Companies for Analysis" section below). Given the high concentration of oil production (91% in 2024 and 92% in the first nine months of 2025) among these companies, the aggregate NPV of these firms can be considered representative of the investment potential for Kazakhstan's entire upstream oil industry.



#### Sources of Information

Benchmarking indicators and investment potential are calculated using publicly available information, including annual reports from the companies and related organizations, audited financial statements of legal entities (from the web portal of the Depository of Financial Statements for Public Interest Organizations of Kazakhstan), data from official company websites, and financial and economic models of megaprojects developed by ENERGY Insights & Analytics for the Tengiz, Kashagan, and Karachaganak oilfields.

# Selection of Companies for Analysis

The scope of the Analytical Platform EXia, the primary tool used for this analysis, includes 50 of Kazakhstan's 97 oil-producing companies (those with any production volume), representing 97% of the country's total oil¹ output in 2024. For simplicity and clarity, the analysis focuses on the 15 largest companies by oil production in 2024, which account for 91% of the total output. The branches of Buzachi Operating Ltd and Dunga Operating Gmbh, with production levels in 2024 of 1.1 and 0.6 million tons accordingly (1.2% и 0.7% of Kazakhstan's total oil production in 2024), are excluded, as their operations are governed by production sharing agreements, meaning their financial and economic data are not publicly available². ENERGY Insights & Analytics plans the development of financial & economic models for these companies in the future.

Thus, ENERGY Insights & Analytics analyzed the financial and production performance of the following 15 oil and gas companies for 2023-2024.

\_

<sup>&</sup>lt;sup>1</sup> Hereinafter, oil means cruder oil and gas condensate

<sup>&</sup>lt;sup>2</sup> A Production Sharing Agreement is not a subsoil use contract, as a result, the company is not a public interest organization, and therefore is not obliged to provide information to the Depository of Financial Statements of the Ministry of Finance of the Republic of Kazakhstan



Oil	production,
r	nillion ton

Company's name     Reference name     2024     2023       Tengizshevroil LLP     TCO     27.81     28.89       North Caspian Operating Company B.V.     NCOC     17.42     18.77       Karachaganak Petroleum Operating B.V.     KPO     12.19     12.06       Mangistaumunaigas JSC     MMG     6.17     6.15       Ozenmunaigas JSC     OMG     5.10     4.88       Embamunaigas JSC     EMG     2.79     2.72       CNPC-Aktobemunaigas JSC     CNPC-AMG     2.50     2.68       Karazhanbasmunai JSC     KBM     2.15     2.05       JV Kazgermunai LLP     KGM     1.04     1.19       Caspi Neft JSC     KN     0.83     0.90       PetroKazakhstan Kumkol Resources JSC     PKKR     0.50     0.55       Kazakhturkmunai LLP     KOA     0.48     0.51       Kazakhturkmunai LLP     KOM     0.44     0.44       Ken-Sary LLP     KS     0.37     0.33       Other companies - in AP EXia scope     Others - EXia scope     4.48     4.74			1111111011	LOII
North Caspian Operating Company B.V.     NCOC     17.42     18.77       Karachaganak Petroleum Operating B.V.     KPO     12.19     12.06       Mangistaumunaigas JSC     MMG     6.17     6.15       Ozenmunaigas JSC     OMG     5.10     4.88       Embamunaigas JSC     EMG     2.79     2.72       CNPC-Aktobemunaigas JSC     CNPC-AMG     2.50     2.68       Karazhanbasmunai JSC     KBM     2.15     2.05       JV Kazgermunai LLP     KGM     1.04     1.19       Caspi Neft JSC     KN     0.83     0.90       PetroKazakhstan Kumkol Resources JSC     PKKR     0.50     0.55       Kazakhdurkmunai LLP     KOA     0.48     0.51       Kazakhturkmunai LLP     KTM     0.44     0.49       Ken-Sary LLP     KS     0.37     0.33       Other companies - in AP EXia scope     Others - EXia scope     4.48     4.74       Other companies - not in AP EXia scope     Others - non-EXia scope     3.04     2.63       Total oil production     87.75     89.97 <tr< th=""><th>Company's name</th><th>Reference name</th><th>2024</th><th>2023</th></tr<>	Company's name	Reference name	2024	2023
Karachaganak Petroleum Operating B.V.     KPO     12.19     12.06       Mangistaumunaigas JSC     MMG     6.17     6.15       Ozenmunaigas JSC     OMG     5.10     4.88       Embamunaigas JSC     EMG     2.79     2.72       CNPC-Aktobemunaigas JSC     CNPC-AMG     2.50     2.68       Karazhanbasmunai JSC     KBM     2.15     2.05       JV Kazgermunai LLP     KGM     1.04     1.19       Caspi Neft JSC     KN     0.83     0.90       PetroKazakhstan Kumkol Resources JSC     PKKR     0.50     0.55       Kazakhoil Aktobe LLP     KOA     0.48     0.51       Kazakhturkmunai LLP     KTM     0.44     0.44       KoZhaN LLP     KOZHAN     0.44     0.49       Ken-Sary LLP     KS     0.37     0.33       Other companies - in AP EXia scope     Others - EXia scope     4.48     4.74       Other companies - not in AP EXia scope     Others - non-EXia scope     3.04     2.63       Total oil production     87.75     89.97       Median valu	Tengizshevroil LLP	TCO	27.81	28.89
Mangistaumunaigas JSC     MMG     6.17     6.15       Ozenmunaigas JSC     OMG     5.10     4.88       Embamunaigas JSC     EMG     2.79     2.72       CNPC-Aktobemunaigas JSC     CNPC-AMG     2.50     2.68       Karazhanbasmunai JSC     KBM     2.15     2.05       JV Kazgermunai LLP     KGM     1.04     1.19       Caspi Neft JSC     KN     0.83     0.90       PetroKazakhstan Kumkol Resources JSC     PKKR     0.50     0.55       Kazakhoil Aktobe LLP     KOA     0.48     0.51       Kazakhturkmunai LLP     KTM     0.44     0.44       KoZhaN LLP     KOZHAN     0.44     0.49       Ken-Sary LLP     KS     0.37     0.33       Other companies - in AP EXia scope     Others - EXia scope     4.48     4.74       Other companies - not in AP EXia scope     Others - non-EXia scope     3.04     2.63       Total oil production     87.75     89.97       Average value     0.92     0.98       Median value     0.06     0.07 </td <td>North Caspian Operating Company B.V.</td> <td>NCOC</td> <td>17.42</td> <td>18.77</td>	North Caspian Operating Company B.V.	NCOC	17.42	18.77
Ozenmunaigas JSC     OMG     5.10     4.88       Embamunaigas JSC     EMG     2.79     2.72       CNPC-Aktobemunaigas JSC     CNPC-AMG     2.50     2.68       Karazhanbasmunai JSC     KBM     2.15     2.05       JV Kazgermunai LLP     KGM     1.04     1.19       Caspi Neft JSC     KN     0.83     0.90       PetroKazakhstan Kumkol Resources JSC     PKKR     0.50     0.55       Kazakhoil Aktobe LLP     KOA     0.48     0.51       Kazakhturkmunai LLP     KTM     0.44     0.44       KoZhaN LLP     KOZHAN     0.44     0.49       Ken-Sary LLP     KS     0.37     0.33       Other companies - in AP EXia scope     Others - EXia scope     4.48     4.74       Other companies - not in AP EXia scope     Others - non-EXia scope     3.04     2.63       Total oil production     87.75     89.97       Average value     0.92     0.98       Median value     0.06     0.07       Number of companies     95     92	Karachaganak Petroleum Operating B.V.	KPO	12.19	12.06
Embamunaigas JSC     EMG     2.79     2.72       CNPC-Aktobemunaigas JSC     CNPC-AMG     2.50     2.68       Karazhanbasmunai JSC     KBM     2.15     2.05       JV Kazgermunai LLP     KGM     1.04     1.19       Caspi Neft JSC     KN     0.83     0.90       PetroKazakhstan Kumkol Resources JSC     PKKR     0.50     0.55       Kazakhoil Aktobe LLP     KOA     0.48     0.51       Kazakhturkmunai LLP     KTM     0.44     0.44       KoZhaN LLP     KOZHAN     0.44     0.49       Ken-Sary LLP     KS     0.37     0.33       Other companies - in AP EXia scope     Others - EXia scope     4.48     4.74       Other companies - not in AP EXia scope     Others - non-EXia scope     3.04     2.63       Total oil production     87.75     89.97       Average value     0.92     0.98       Median value     0.06     0.07       Number of companies     95     92	Mangistaumunaigas JSC	MMG	6.17	6.15
CNPC-Aktobemunaigas JSC     CNPC-AMG     2.50     2.68       Karazhanbasmunai JSC     KBM     2.15     2.05       JV Kazgermunai LLP     KGM     1.04     1.19       Caspi Neft JSC     KN     0.83     0.90       PetroKazakhstan Kumkol Resources JSC     PKKR     0.50     0.55       Kazakhoil Aktobe LLP     KOA     0.48     0.51       Kazakhturkmunai LLP     KTM     0.44     0.44       KOZHAN LLP     KOZHAN     0.44     0.49       Ken-Sary LLP     KS     0.37     0.33       Other companies - in AP EXia scope     Others - EXia scope     4.48     4.74       Other companies - not in AP EXia scope     Others - non-EXia scope     3.04     2.63       Total oil production     87.75     89.97       Average value     0.92     0.98       Median value     0.06     0.07       Number of companies     95     92	Ozenmunaigas JSC	OMG	5.10	4.88
Karazhanbasmunai JSC   KBM   2.15   2.05     JV Kazgermunai LLP   KGM   1.04   1.19     Caspi Neft JSC   KN   0.83   0.90     PetroKazakhstan Kumkol Resources JSC   PKKR   0.50   0.55     Kazakhoil Aktobe LLP   KOA   0.48   0.51     Kazakhturkmunai LLP   KTM   0.44   0.44     KoZhaN LLP   KOZHAN   0.44   0.49     Ken-Sary LLP   KS   0.37   0.33     Other companies - in AP EXia scope   Others - EXia scope   4.48   4.74     Other companies - not in AP EXia scope   Others - non-EXia scope   3.04   2.63     Total oil production   87.75   89.97     Average value   0.92   0.98     Median value   0.06   0.07     Number of companies   95   92	Embamunaigas JSC	EMG	2.79	2.72
JV Kazgermunai LLP   KGM   1.04   1.19     Caspi Neft JSC   KN   0.83   0.90     PetroKazakhstan Kumkol Resources JSC   PKKR   0.50   0.55     Kazakhoil Aktobe LLP   KOA   0.48   0.51     Kazakhturkmunai LLP   KTM   0.44   0.44     KoZhaN LLP   KOZHAN   0.44   0.49     Ken-Sary LLP   KS   0.37   0.33     Other companies - in AP EXia scope   Others - EXia scope   4.48   4.74     Other companies - not in AP EXia scope   Others - non-EXia scope   3.04   2.63     Total oil production   87.75   89.97     Average value   0.92   0.98     Median value   0.06   0.07     Number of companies   95   92	CNPC-Aktobemunaigas JSC	CNPC-AMG	2.50	2.68
Caspi Neft JSC     KN     0.83     0.90       PetroKazakhstan Kumkol Resources JSC     PKKR     0.50     0.55       Kazakhoil Aktobe LLP     KOA     0.48     0.51       Kazakhturkmunai LLP     KTM     0.44     0.44       KoZhaN LLP     KOZHAN     0.44     0.49       Ken-Sary LLP     KS     0.37     0.33       Other companies - in AP EXia scope     Others - EXia scope     4.48     4.74       Other companies - not in AP EXia scope     Others - non-EXia scope     3.04     2.63       Total oil production     87.75     89.97       Average value     0.92     0.98       Median value     0.06     0.07       Number of companies     95     92	Karazhanbasmunai JSC	KBM	2.15	2.05
PetroKazakhstan Kumkol Resources JSC     PKKR     0.50     0.55       Kazakhoil Aktobe LLP     KOA     0.48     0.51       Kazakhturkmunai LLP     KTM     0.44     0.44       KoZhaN LLP     KOZHAN     0.44     0.49       Ken-Sary LLP     KS     0.37     0.33       Other companies - in AP EXia scope     Others - EXia scope     4.48     4.74       Other companies - not in AP EXia scope     Others - non-EXia scope     3.04     2.63       Total oil production     87.75     89.97       Average value     0.92     0.98       Median value     0.06     0.07       Number of companies     95     92	JV Kazgermunai LLP	KGM	1.04	1.19
Kazakhoil Aktobe LLP   KOA   0.48   0.51     Kazakhturkmunai LLP   KTM   0.44   0.44     KoZhaN LLP   KOZHAN   0.44   0.49     Ken-Sary LLP   KS   0.37   0.33     Other companies - in AP EXia scope   Others - EXia scope   4.48   4.74     Other companies - not in AP EXia scope   Others - non-EXia scope   3.04   2.63     Total oil production   87.75   89.97     Average value   0.92   0.98     Median value   0.06   0.07     Number of companies   95   92	Caspi Neft JSC	KN	0.83	0.90
Kazakhturkmunai LLP   KTM   0.44   0.44     KoZhaN LLP   KOZHAN   0.44   0.49     Ken-Sary LLP   KS   0.37   0.33     Other companies - in AP EXia scope   Others - EXia scope   4.48   4.74     Other companies - not in AP EXia scope   Others - non-EXia scope   3.04   2.63     Total oil production   87.75   89.97     Average value   0.92   0.98     Median value   0.06   0.07     Number of companies   95   92	PetroKazakhstan Kumkol Resources JSC	PKKR	0.50	0.55
KoZhaN LLP     KOZHAN     0.44     0.49       Ken-Sary LLP     KS     0.37     0.33       Other companies - in AP EXia scope     Others - EXia scope     4.48     4.74       Other companies - not in AP EXia scope     Others - non-EXia scope     3.04     2.63       Total oil production     87.75     89.97       Average value     0.92     0.98       Median value     0.06     0.07       Number of companies     95     92	Kazakhoil Aktobe LLP	KOA	0.48	0.51
Ken-Sary LLP   KS   0.37   0.33     Other companies - in AP EXia scope   Others - EXia scope   4.48   4.74     Other companies - not in AP EXia scope   Others - non-EXia scope   3.04   2.63     Total oil production   87.75   89.97     Average value   0.92   0.98     Median value   0.06   0.07     Number of companies   95   92	Kazakhturkmunai LLP	KTM	0.44	0.44
Other companies - in AP EXia scopeOthers - EXia scope4.484.74Other companies - not in AP EXia scopeOthers - non-EXia scope3.042.63Total oil production87.7589.97Average value0.920.98Median value0.060.07Number of companies9592	KoZhaN LLP	KOZHAN	0.44	0.49
Other companies - not in AP EXia scope     Others - non-EXia scope     3.04     2.63       Total oil production     87.75     89.97       Average value     0.92     0.98       Median value     0.06     0.07       Number of companies     95     92	Ken-Sary LLP	KS	0.37	0.33
Total oil production     87.75     89.97       Average value     0.92     0.98       Median value     0.06     0.07       Number of companies     95     92	Other companies - in AP EXia scope	Others - EXia scope	4.48	4.74
Average value     0.92     0.98       Median value     0.06     0.07       Number of companies     95     92	Other companies - not in AP EXia scope	Others - non-EXia scope	3.04	2.63
Median value     0.06     0.07       Number of companies     95     92	Total oil production		87.75	89.97
Number of companies 95 92	Average value		0.92	0.98
	Median value	0.06	0.07	
Share of TOP-15 91% 92%	Number of companies	95	92	
	Share of TOP-15	91%	92%	

Source: ENERGY Insight & Analytics

The number of oil-producing companies with active oil production rose from 92 in 2023 to 95 in 2024<sup>3</sup>. Production remains highly concentrated, with the top 15 out of 95 companies accounting for 91% of total output in 2024, a 1% decrease from 2023. In 2024, the average annual production per company was 0.92 million tons (down from 0.98 million tons in 2023), while the median production was 62 thousand tons (compared to 75 thousand tons in 2023)<sup>4</sup>. In 2024, total production outside of the top 15 producers was 7.52 million tons (94 thousand tons per company on average).

KTM replaced KOZHAN at  $\#13^{th}$  (2023:  $\#14^{th}$ ) in 2024, whereas KS is at  $\#15^{th}$ , replacing KMK-M (2023: KS – in Other – AP EXia scope). Comparative numbers for 2023 are updated accordingly.

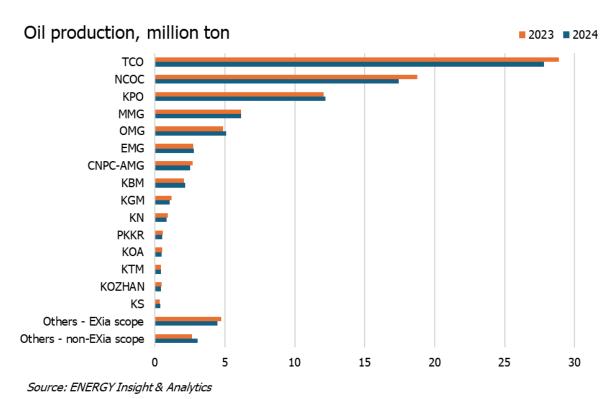
<sup>&</sup>lt;sup>3</sup> 94 companies in the first nine months of 2025

<sup>&</sup>lt;sup>4</sup> In the first nine months of 2025 the average annualized production per company was 1.07 million tons and the median annualized production was 66 thousand tons



# Benchmarking

It is crucial to understand the dynamics of the key indicators of the companies being analyzed to assess investment potential. Aside from oil production, these indicators are presented on a per-ton-of-oil-produced basis to highlight each company's efficiency, independent of its production scale. At the same time, for clarity, the charts maintain the sorting of companies in order of decreasing production levels.



Regarding oil production, TCO leads with 27.8 million tons in 2024. Overall, the megaprojects (TCO, NCOC, and KPO) account for 65% of Kazakhstan's production (66% in 2023)<sup>5</sup>.

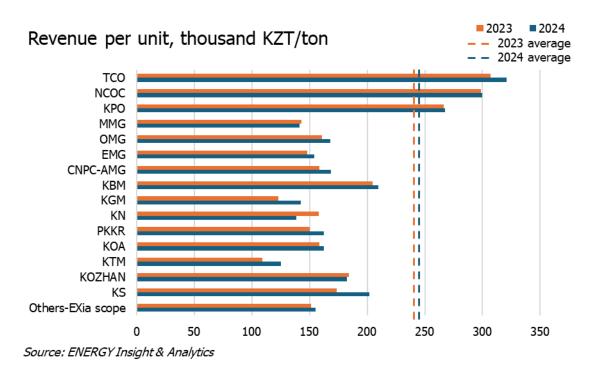
The following key macro indicators should be considered to understand the significance of the assessed key macro indicators:

Macro indicator	UoM	2024	2023
Brent crude oil price	USD/barrel	80.53	82.49
Average exchange rate	KZT/USD	469.44	456.31

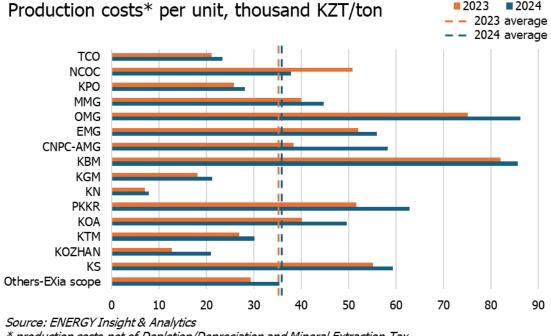
Sources: U.S. Energy Information Administration (EIA), National Bank of Kazakhstan

<sup>5</sup> Megaprojects' production accounted for 70% of Kazakhstan's total production during the first nine months of 2025





TCO had the highest per unit revenue in 2024, at 321 thousand KZT per ton, while KTM had the lowest at 125 thousand KZT per ton of oil produced. The perimeter average of the Analytical Platform EXia was 248 thousand KZT per ton in 2024, compared to 244 thousand KZT per ton in 2023.

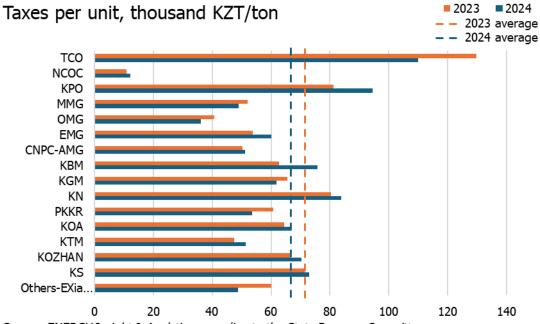


\* production costs net of Depletion/Depreciation and Mineral Extraction Tax

The highest production costs per unit in 2024 were at KBM, amounting to 86 thousand KZT per ton, while the lowest was at KN, at 8 thousand KZT per ton of oil produced. The perimeter



average of the Analytical Platform EXia was 36 thousand KZT per ton in 2024, compared to 35 thousand KZT per ton in 2023.

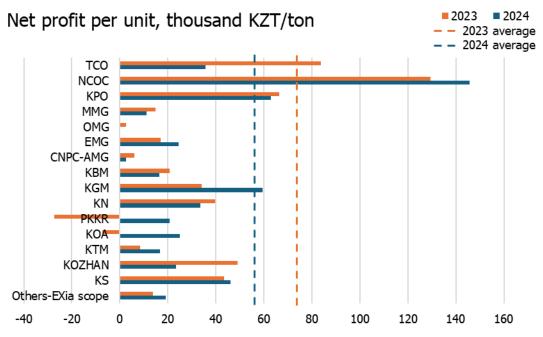


Source: ENERGY Insight & Analytics according to the State Revenue Committee of the Ministry of Finance of the Republic of Kazakhstan on amounts paid by taxpayers

In 2024, TCO paid the highest per unit taxes at 110 thousand KZT per ton, while NCOC had the lowest at 12 thousand KZT per ton of oil produced<sup>6</sup>. The average across the Analytical Platform EXia's perimeter was 67 thousand KZT per ton in 2024, down from 72 thousand KZT per ton in 2023.

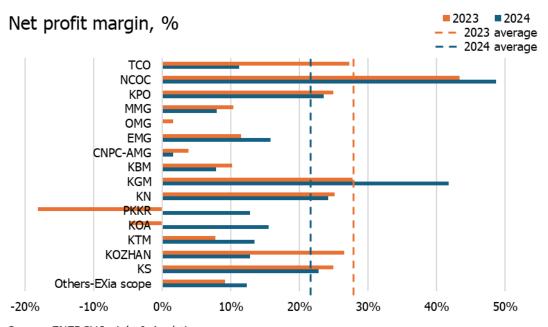
<sup>&</sup>lt;sup>6</sup> Factors of relatively low taxes from NCOC were described in the article <u>"Exceptional Kashagan – Terms and Prospects"</u> by ENERGY Insights & Analytics





Source: ENERGY Insight & Analytics

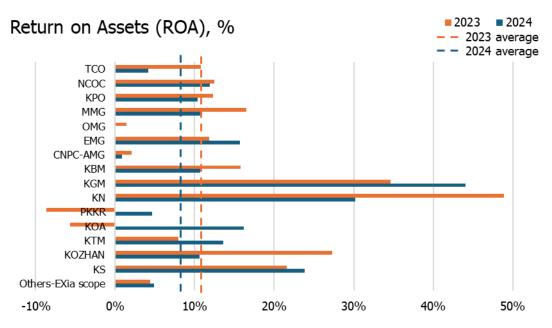
In 2024, NCOC had the highest net profit per unit, amounting to 146 thousand KZT per ton, while OMG recorded the lowest, with a loss of less than 1 thousand KZT per ton of oil produced. The perimeter average on the Analytical Platform EXia was 54 thousand KZT per ton in 2024, down from 67 thousand KZT per ton in 2023.



Source: ENERGY Insight & Analytics



The highest net profit margin in 2024 was in NCOC at 49%, while OMG posted the lowest at 0%. According to the Analytics Platform EXia, the average for the perimeter stands at 21.7% in 2024, compared to 27.4% in 2023.



Source: ENERGY Insight & Analytics

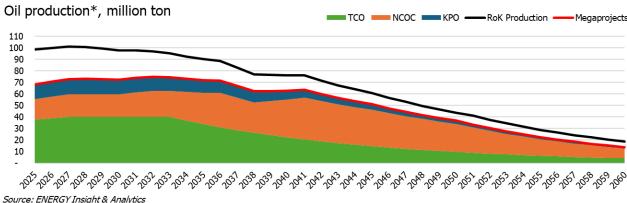
The highest return on assets (ROA) in 2024 is 44% for KGM, while the lowest is 0% for OMG. The average ROA for the Analytics Platform EXia is 8.1% in 2024, compared to 11.3% in 2023.

# Prospects for Kazakhstan's Oil Production

An oil production forecast has been prepared by ENERGY Insights & Analytics to assess investment potential. This forecast includes only projects where investments have already been made, are currently underway, or where final investment decisions have been made, ensuring that investments will begin soon. For example, Phases 2B and 3 of the Kashagan project are not included, as the timing for investment and subsequent oil production remains uncertain. Similarly, oil production from the Kalamkas-sea & Khazar project is excluded for the same reason. Moreover, LUKOIL's <u>recent announcement of its intention to divest international assets</u> due to Western sanctions adds another layer of uncertainty to the Kalamkas-sea & Khazar project, in which the Russian oil giant holds a 50% stake.



The forecast predicts that oil production will increase from 98 million tons in 2025<sup>7</sup> to a peak of 101 million tons by 2027, driven primarily by the planned expansions of megaprojects. However, production from other companies is expected to decline<sup>8</sup>. By 2048, the share of megaprojects in Kazakhstan's total oil production is projected to reach a maximum of 84%, compared to 65% in 2024.



source. ENEXGY Trisign & Ariangus \* including FGP/WPMP project for TCO, 1 bcma and 2,5 bcma (Phase 2A) projects for NCOC, KEP1 A+B for KPO

According to the forecast prepared by the Government of the Republic of Kazakhstan, oil production is projected to reach 96.29 and 100.510 million tons in 2025 and 2026 accordingly. Maintaining (relatively high) targets for oil production will require maintaining and enhancing the sector's investment attractiveness, a topic explored in detail in our recent <u>«Global Megaprojects – Energy Pragmatism and Advantaged Barrels»</u> article and in S&P Global Commodity Insights' article «Kazakhstan's overall attractiveness for upstream investment: insights from S&P Global's E&P ratings», which was published in our flagship analytical report, Kazakhstan Energy Outlook 2024.

#### **Current Investment Potential**

Investment potential was assessed based on the dynamics of key financial and economic indicators for oil-producing companies. These include operating, transportation, and capital costs, tax regime parameters, oil sales structure, cash and debt balances, and forecast oil production profiles, among other assumptions. The key assumptions are outlined below.

<sup>8</sup> Please see the article <u>"Mature Oilfields – Nurture and Revitalize"</u> by ENERGY Insights & Analytics for details

<sup>&</sup>lt;sup>7</sup> The actual production in the first nine months of 2025 was 75.7 million tons

<sup>&</sup>lt;sup>9</sup> On January 8, 2025, the Ministry of Energy of Kazakhstan <u>announced</u> an adjustment to the oil production plan for 2025 to 96.2 million tons.

<sup>&</sup>lt;sup>10</sup> Forecasted revenues from oil sector organizations to the National Fund for 2026 is based on oil production plan for 2026 of 100.5 million tons according to the Law of the Republic of Kazakhstan "On the Republican Budget for 2026-2028"

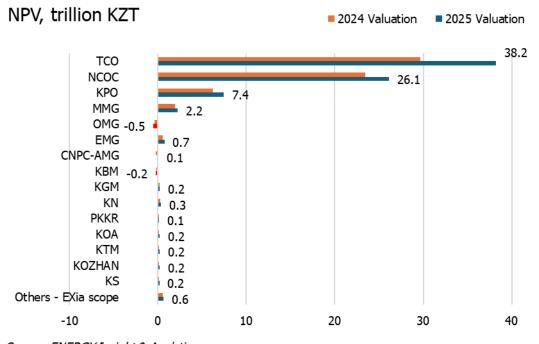


NPVs were calculated using the Analytical Platform EXia. As mentioned earlier, NPV indicates investment potential: the higher the NPV, the better. Conversely, companies with an NPV below zero are either destroying shareholder value or are expected to do so in the future.

Assumption	UoM	2026	2030	2035	2040
Brent crude price	USD/barrel	71	77	85	94
Average exchange rate	KZT/USD	540	540	540	540
Inflation KZT	%	10.0%	6.0%	6.0%	6.0%
Inflation USD	%	2.2%	2.2%	2.2%	2.2%

Source: ENERGY Insight & Analytics

A discount rate of  $10.3\%^{10}$  was applied to assess the present value of cash flows. The discount rate (cost of capital) is consistent with <u>Aswath Damodaran's</u> calculations for upstream oil companies in emerging markets.



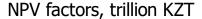
Source: ENERGY Insight & Analytics

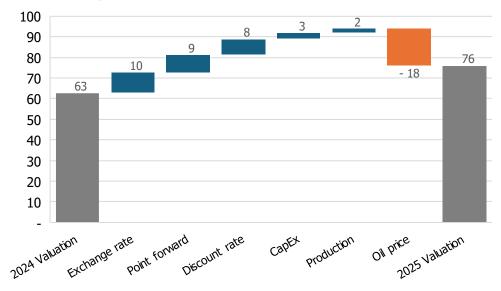
The total NPV of oil-producing companies included in the scope of the Analytical Platform EXia is estimated at 76 trillion KZT (141 billion USD). TCO has the highest NPV at 38.2 trillion KZT (70.8 billion USD), while OMG has the lowest, with a negative NPV of -0.5 trillion KZT (-1.0 billion USD). Megaprojects account for 94% of Kazakhstan's oil industry's total NPV, thus its investment potential.

-

<sup>&</sup>lt;sup>10</sup> The discount rate applied for 2024 valuation is 12.5%

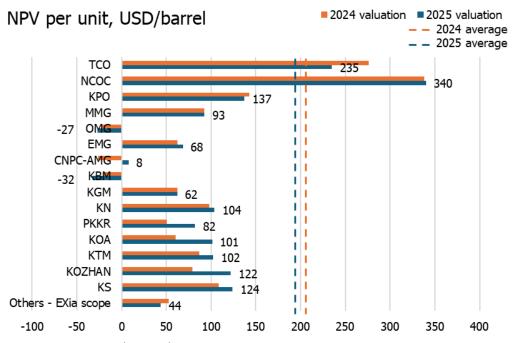






Source: ENERGY Insight & Analytics

The absolute increase in the total NPV compared to last year's analysis is around 13 trillion KZT. This change in NPV valuation is mostly explained by four factors: the rise of the KZT/USD exchange rate from 470 to 540 adds 10 trillion KZT, moving forward the point of discounting period from 2024 to 2025 adds 9 trillion KZT, a decrease of the discount rate from 12.5% to 10.3% adds another 8 trillion KZT, while a decrease in the forecasted Brent crude oil price removes 18 trillion KZT. Speaking company-wise, almost 93% of the increase is explained by the increased combined NPV of megaprojects from 59 to 72 trillion KZT.



Source: ENERGY Insight & Analytics



A significant gap in oil production volumes between megaprojects and other oil-producing companies makes it challenging to compare their prospects directly. NPV per unit of (expected) oil produced in 2025 was calculated to enable a more meaningful comparison. NCOC has the highest NPV per unit at 340 USD per barrel (1.5 million KZT per ton of oil produced). The average NPV value across the perimeter of the Analytical Platform EXia is 193 USD per barrel (806 thousand KZT per ton of oil produced).

## The Bottom Line

Updated analysis by ENERGY Insights & Analytics confirms that Kazakhstan's upstream oil industry maintains substantial investment potential, though this value remains heavily concentrated in the three megaprojects: TCO, NCOC, and KPO. These projects account for the overwhelming majority of the sector's total NPV, and their dominance is expected to strengthen further over the coming decades. The recently approved Tax Code changes are unlikely to materially alter the current investment landscape. While the new fiscal framework provides greater regulatory certainty, it does not fundamentally shift the competitive dynamics that favor megaprojects over other oil producers. These large-scale projects continue to benefit from their status as "advantaged barrels". Their advantages stem from massive reserve bases, lower unit costs, established infrastructure, and stable fiscal terms, positioning them favorably in an increasingly cost-conscious global energy market. The outlook for mature fields presents a contrasting picture. Production from assets operated by (relatively to megaprojects) smaller and mid-sized companies continues its structural decline, driven by natural reservoir depletion, rising operating costs, and limited financial capacity for major capital programs. The investment potential per barrel for these producers remains below that of the megaprojects, reflecting fundamental operational and economic constraints.

It is important to recognize that investment potential and investment climate represent a complex, multifaceted challenge. The Analytical Platform EXia is currently the only domestic tool capable of conducting comprehensive economic calculations and assessing the tax burden impact on investment potential. However, investment attractiveness extends beyond fiscal and economic metrics. Geological potential and the broader system of state regulation play equally critical roles in shaping the sector's prospects. A thorough assessment of these interconnected factors requires coordinated analytical work at the state level to develop a holistic understanding of the industry's investment landscape and identify pathways for sustainable development<sup>11</sup>.

<sup>&</sup>lt;sup>11</sup> Comparison of approaches of states to enhance oil production sector in the joint research <u>"Oil & Gas Regulatory Landscape – Learning Cases for Kazakhstan"</u> by Rystad Energy and ENERGY Insights & Analytics



# **ENERGY Insights & Analytics**

Analytical center "ENERGY" LLP (ENERGY Insight & Analytics) is a joint venture between <a href="the-KAZENERGY Association">the KAZENERGY Association</a> and the IT company <a href="AppStream">AppStream</a>. 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.

## Disclaimer

This document is for informational purposes only. The information in this document is not a recommendation to buy, hold until maturity, sell any securities, or make any investment decisions, and is not a call for action.

Any statement, estimate, or forecast included in this document regarding the expected future results may not be accurate and, therefore, should not be relied upon as an obligation or assurance regarding future results. Analytical Center "ENERGY" LLP (hereafter — ENERGY Insight & Analytics) does not assume any obligation or liability with respect to the recipient or any other person for damage or loss of any kind resulting from the use or erroneous use of this document or its part by the recipient or other person; does not accept and does not assume any future obligations to update the document or its part or to clarify or notify any person about inaccuracies contained in the document or its part that may be revealed.

ENERGY Insight & Analytics materials cannot replace the knowledge, judgment, and experience of the users, their management, employees, consultants, and (or) clients during the adoption of investment and other business decisions. ENERGY Insight & Analytics receives information from sources that are, in the company's opinion, reliable, but ENERGY Insight & Analytics is not responsible for the accuracy of the information, i.e., does not audit or otherwise verify the data presented and is not responsible for their accuracy and completeness.

#### Contact and Follow Us

- www.exia.kz
- info@exia.kz
- https://www.linkedin.com/company/energy-insight/
- 2 10 D. Kunayev street, Astana, Kazakhstan