KazMunayGas National Company JCS

2025 CDP Corporate Questionnaire 2025

Word version

Important: this export excludes unanswered questions
This document is an export of your organization's CDP questionnaire response. It contains all data points for questions that are answered or in progress. There may be questions or data points that you have been requested to provide, which are missing from this document because they are currently unanswered. Please note that it is your responsibility to verify that your questionnaire response is complete prior to submission. CDP will not be liable for any failure to do so.
Read full terms of disclosure

.

09/24/2025, 11:12 am

Contents

C1. Introduction 9

(1.1) In which language are you submitting your response? 9

(1.2) Select the currency used for all financial information disclosed throughout your response. 9

(1.3) Provide an overview and introduction to your organization. 9

(1.4) State the end date of the year for which you are reporting data. For emissions data, indicate whether you will be providing emissions data for past reporting years. 10

(1.4.1) What is your organization's annual revenue for the reporting period? 11

(1.5) Provide details on your reporting boundary. 11

(1.6) Does your organization have an ISIN code or another unique identifier (e.g., Ticker, CUSIP, etc.)? 11

(1.7) Select the countries/areas in which you operate. 15

(1.8) Are you able to provide geolocation data for your facilities? 16

(1.8.1) Please provide all available geolocation data for your facilities. 16

(1.19) In which part of the oil and gas value chain does your organization operate? 28

(1.24) Has your organization mapped its value chain? 28

(1.24.1) Have you mapped where in your direct operations or elsewhere in your value chain plastics are produced, commercialized, used, and/or disposed of? 29

C2. Identification, assessment, and management of dependencies, impacts, risks, and opportunities 31

(2.1) How does your organization define short-, medium-, and long-term time horizons in relation to the identification, assessment, and management of your environmental dependencies, impacts, risks, and opportunities? 31

(2.2) Does your organization have a process for identifying, assessing, and managing environmental dependencies and/or impacts? 32

(2.2.1) Does your organization have a process for identifying, assessing, and managing environmental risks and/or opportunities? 33

(2.2.2) Provide details of your organization's process for identifying, assessing, and managing environmental dependencies, impacts, risks, and/or opportunities. 33

(2.2.7) Are the interconnections between environmental dependencies, impacts, risks and/or opportunities assessed? 43

(2.3) Have you identified priority locations across your value chain? 44

(2.4) How does your organization define substantive effects on your organization? 45

(2.5) Does your organization identify and classify potential water pollutants associated with its activities that could have a detrimental impact on water ecosystems or human health? 47

(2.5.1) Describe how your organization minimizes the adverse impacts of potential water pollutants on water ecosystems or human health associated with your activities. 48

C3. Disclosure of risks and opportunities 51

(3.1) Have you identified any environmental risks which have had a substantive effect on your organization in the reporting year, or are anticipated to have a substantive effect on your organization in the future? ... 51

(3.1.1) Provide details of the environmental risks identified which have had a substantive effect on your organization in the reporting year, or are anticipated to have a substantive effect on your organization in the future. ... 52

(3.1.2) Provide the amount and proportion of your financial metrics from the reporting year that are vulnerable to the substantive effects of environmental risks. ... 76

(3.2) Within each river basin, how many facilities are exposed to substantive effects of water-related risks, and what percentage of your total number of facilities does this represent? ... 78

(3.3) In the reporting year, was your organization subject to any fines, enforcement orders, and/or other penalties for water-related regulatory violations? ... 81

(3.3.1) Provide the total number and financial value of all water-related fines. ... 82

(3.5) Are any of your operations or activities regulated by a carbon pricing system (i.e. ETS, Cap & Trade or Carbon Tax)? ... 82

(3.5.1) Select the carbon pricing regulation(s) which impact your operations. ... 83

(3.5.2) Provide details of each Emissions Trading Scheme (ETS) your organization is regulated by. ... 83

(3.5.4) What is your strategy for complying with the systems you are regulated by or anticipate being regulated by? ... 85

(3.6) Have you identified any environmental opportunities which have had a substantive effect on your organization in the reporting year, or are anticipated to have a substantive effect on your organization in the future? ... 86

(3.6.1) Provide details of the environmental opportunities identified which have had a substantive effect on your organization in the reporting year, or are anticipated to have a substantive effect on your organization in the future. ... 87

(3.6.2) Provide the amount and proportion of your financial metrics in the reporting year that are aligned with the substantive effects of environmental opportunities. ... 107

C4. Governance ... 110

(4.1) Does your organization have a board of directors or an equivalent governing body? ... 110

(4.1.1) Is there board-level oversight of environmental issues within your organization? ... 111

(4.1.2) Identify the positions (do not include any names) of the individuals or committees on the board with accountability for environmental issues and provide details of the board's oversight of environmental issues. ... 111

(4.2) Does your organization's board have competency on environmental issues? ... 116

(4.3) Is there management-level responsibility for environmental issues within your organization? ... 117

(4.3.1) Provide the highest senior management-level positions or committees with responsibility for environmental issues (do not include the names of individuals). ... 118

(4.5) Do you provide monetary incentives for the management of environmental issues, including the attainment of targets? ... 139

(4.5.1) Provide further details on the monetary incentives provided for the management of environmental issues (do not include the names of individuals). ... 140

(4.6) Does your organization have an environmental policy that addresses environmental issues? ... 142

(4.6.1) Provide details of your environmental policies. ... 142

(4.10) Are you a signatory or member of any environmental collaborative frameworks or initiatives? ... 150

(4.11) In the reporting year, did your organization engage in activities that could directly or indirectly influence policy, law, or regulation that may (positively or negatively) impact the environment? 151

(4.11.2) Provide details of your indirect engagement on policy, law, or regulation that may (positively or negatively) impact the environment through trade associations or other intermediary organizations or individuals in the reporting year. 153

(4.12) Have you published information about your organization's response to environmental issues for this reporting year in places other than your CDP response? 162

(4.12.1) Provide details on the information published about your organization's response to environmental issues for this reporting year in places other than your CDP response. Please attach the publication. 162

C5. Business strategy 167

(5.1) Does your organization use scenario analysis to identify environmental outcomes? 167

(5.1.1) Provide details of the scenarios used in your organization's scenario analysis. 167

(5.1.2) Provide details of the outcomes of your organization's scenario analysis. 186

(5.2) Does your organization's strategy include a climate transition plan? 187

(5.3) Have environmental risks and opportunities affected your strategy and/or financial planning? 190

(5.3.1) Describe where and how environmental risks and opportunities have affected your strategy. 190

(5.3.2) Describe where and how environmental risks and opportunities have affected your financial planning. 193

(5.4) In your organization's financial accounting, do you identify spending/revenue that is aligned with your organization's climate transition? 194

(5.5) Does your organization invest in research and development (R&D) of low-carbon products or services related to your sector activities? 195

(5.5.7) Provide details of your organization's investments in low-carbon R&D for your sector activities over the last three years. 196

(5.6) Break down, by fossil fuel expansion activity, your organization's CAPEX in the reporting year and CAPEX planned over the next 5 years. 200

(5.8) Disclose the breakeven price (US$/BOE) required for cash neutrality during the reporting year, i.e. where cash flow from operations covers CAPEX and dividends paid / share buybacks. 202

(5.9) What is the trend in your organization's water-related capital expenditure (CAPEX) and operating expenditure (OPEX) for the reporting year, and the anticipated trend for the next reporting year? 202

(5.10) Does your organization use an internal price on environmental externalities? 203

(5.10.1) Provide details of your organization's internal price on carbon. 203

(5.10.2) Provide details of your organization's internal price on water. 206

(5.11) Do you engage with your value chain on environmental issues? 208

(5.11.1) Does your organization assess and classify suppliers according to their dependencies and/or impacts on the environment? 209

(5.11.2) Does your organization prioritize which suppliers to engage with on environmental issues? 210

(5.11.5) Do your suppliers have to meet environmental requirements as part of your organization's purchasing process? 211

(5.11.7) Provide further details of your organization's supplier engagement on environmental issues. 212

(5.11.9) Provide details of any environmental engagement activity with other stakeholders in the value chain. ... 212
(5.12) Indicate any mutually beneficial environmental initiatives you could collaborate on with specific CDP Supply Chain members. ... 217
(5.13) Has your organization already implemented any mutually beneficial environmental initiatives due to CDP Supply Chain member engagement? ... 218

C6. Environmental Performance - Consolidation Approach ... 220
(6.1) Provide details on your chosen consolidation approach for the calculation of environmental performance data. ... 220

C7. Environmental performance - Climate Change ... 222
(7.1) Is this your first year of reporting emissions data to CDP? ... 222
(7.1.1) Has your organization undergone any structural changes in the reporting year, or are any previous structural changes being accounted for in this disclosure of emissions data? ... 222
(7.1.2) Has your emissions accounting methodology, boundary, and/or reporting year definition changed in the reporting year? ... 223
(7.1.3) Have your organization's base year emissions and past years' emissions been recalculated as a result of any changes or errors reported in 7.1.1 and/or 7.1.2? ... 223
(7.2) Select the name of the standard, protocol, or methodology you have used to collect activity data and calculate emissions. ... 223
(7.3) Describe your organization's approach to reporting Scope 2 emissions. ... 224
(7.4) Are there any sources (e.g. facilities, specific GHGs, activities, geographies, etc.) of Scope 1, Scope 2 or Scope 3 emissions that are within your selected reporting boundary which are not included in your disclosure? ... 224
(7.5) Provide your base year and base year emissions. ... 225
(7.6) What were your organization's gross global Scope 1 emissions in metric tons CO2e? ... 232
(7.7) What were your organization's gross global Scope 2 emissions in metric tons CO2e? ... 233
(7.8) Account for your organization's gross global Scope 3 emissions, disclosing and explaining any exclusions. ... 235
(7.8.1) Disclose or restate your Scope 3 emissions data for previous years. ... 243
(7.9) Indicate the verification/assurance status that applies to your reported emissions. ... 249
(7.9.1) Provide further details of the verification/assurance undertaken for your Scope 1 emissions, and attach the relevant statements. ... 249
(7.9.2) Provide further details of the verification/assurance undertaken for your Scope 2 emissions and attach the relevant statements. ... 251
(7.9.3) Provide further details of the verification/assurance undertaken for your Scope 3 emissions and attach the relevant statements. ... 253
(7.10) How do your gross global emissions (Scope 1 and 2 combined) for the reporting year compare to those of the previous reporting year? ... 254
(7.10.1) Identify the reasons for any change in your gross global emissions (Scope 1 and 2 combined), and for each of them specify how your emissions compare to the previous year. ... 255
(7.10.2) Are your emissions performance calculations in 7.10 and 7.10.1 based on a location-based Scope 2 emissions figure or a market-based Scope 2 emissions figure? ... 261
(7.12) Are carbon dioxide emissions from biogenic carbon relevant to your organization? ... 261

(7.15) Does your organization break down its Scope 1 emissions by greenhouse gas type? 261
(7.15.1) Break down your total gross global Scope 1 emissions by greenhouse gas type and provide the source of each used global warming potential (GWP). 261
(7.15.4) Break down your total gross global Scope 1 emissions from oil and gas value chain production activities by greenhouse gas type. 263
(7.16) Break down your total gross global Scope 1 and 2 emissions by country/area. 273
(7.17) Indicate which gross global Scope 1 emissions breakdowns you are able to provide. 273
(7.17.3) Break down your total gross global Scope 1 emissions by business activity. 274
(7.19) Break down your organization's total gross global Scope 1 emissions by sector production activity in metric tons CO2e. 274
(7.20) Indicate which gross global Scope 2 emissions breakdowns you are able to provide. 275
(7.20.3) Break down your total gross global Scope 2 emissions by business activity. 275
(7.21) Break down your organization's total gross global Scope 2 emissions by sector production activity in metric tons CO2e. 276
(7.22) Break down your gross Scope 1 and Scope 2 emissions between your consolidated accounting group and other entities included in your response. 277
(7.23) Is your organization able to break down your emissions data for any of the subsidiaries included in your CDP response? 278
(7.23.1) Break down your gross Scope 1 and Scope 2 emissions by subsidiary. 278
(7.24) Report your methane emissions as percentages of natural gas and hydrocarbon production or throughput. 300
(7.26) Allocate your emissions to your customers listed below according to the goods or services you have sold them in this reporting period. 302
(7.27) What are the challenges in allocating emissions to different customers, and what would help you to overcome these challenges? 304
(7.28) Do you plan to develop your capabilities to allocate emissions to your customers in the future? 304
(7.29) What percentage of your total operational spend in the reporting year was on energy? 305
(7.30) Select which energy-related activities your organization has undertaken. 305
(7.30.1) Report your organization's energy consumption totals (excluding feedstocks) in MWh. 306
(7.30.6) Select the applications of your organization's consumption of fuel. 309
(7.30.7) State how much fuel in MWh your organization has consumed (excluding feedstocks) by fuel type. 309
(7.30.9) Provide details on the electricity, heat, steam, and cooling your organization has generated and consumed in the reporting year. 316
(7.30.14) Provide details on the electricity, heat, steam, and/or cooling amounts that were accounted for at a zero or near-zero emission factor in the market-based Scope 2 figure reported in 7.7. 318
(7.30.16) Provide a breakdown by country/area of your electricity/heat/steam/cooling consumption in the reporting year. 320
(7.38) Disclose your net liquid and gas hydrocarbon production (total of subsidiaries and equity-accounted entities). 322
(7.38.1) Explain which listing requirements or other methodologies you use to report reserves data. If your organization cannot provide data due to legal restrictions on reporting reserves figures in certain countries/areas, please explain this. 322
(7.38.2) Disclose your estimated total net reserves and resource base (million boe), including the total associated with subsidiaries and equity-accounted entities. 322

(7.38.3) Provide an indicative percentage split for 2P, 3P reserves, and total resource base by hydrocarbon categories. 323
(7.38.4) Provide an indicative percentage split for production, 1P, 2P, 3P reserves, and total resource base by development types. 325
(7.43) Disclose your total refinery throughput capacity in the reporting year in thousand barrels per day. 326
(7.43.1) Disclose feedstocks processed in the reporting year in million barrels per year. 327
(7.43.2) Are you able to break down your refinery products and net production? 328
(7.43.3) Disclose your refinery products and net production in the reporting year in million barrels per year. 328
(7.43.4) Please disclose your petrochemicals production in the reporting year in thousand metric tons. 330
(7.45) Describe your gross global combined Scope 1 and 2 emissions for the reporting year in metric tons CO2e per unit currency total revenue and provide any additional intensity metrics that are appropriate to your business operations. 331
(7.48) Provide the intensity figures for Scope 1 emissions (metric tons CO2e) per unit of hydrocarbon category. 332
(7.52) Provide any additional climate-related metrics relevant to your business. 336
(7.53) Did you have an emissions target that was active in the reporting year? 338
(7.53.1) Provide details of your absolute emissions targets and progress made against those targets. 338
(7.53.2) Provide details of your emissions intensity targets and progress made against those targets. 352
(7.54) Did you have any other climate-related targets that were active in the reporting year? 371
(7.54.1) Provide details of your targets to increase or maintain low-carbon energy consumption or production. 371
(7.54.2) Provide details of any other climate-related targets, including methane reduction targets. 376
(7.54.4) Indicate which targets reported in 7.53.1/2 incorporate methane emissions, or if you do not have a methane-specific emissions reduction target for your oil and gas activities, please explain why not and forecast how your methane emissions will change over the next five years. 388
(7.55) Did you have emissions reduction initiatives that were active within the reporting year? Note that this can include those in the planning and/or implementation phases. 389
(7.55.1) Identify the total number of initiatives at each stage of development, and for those in the implementation stages, the estimated CO2e savings. 389
(7.55.2) Provide details on the initiatives implemented in the reporting year in the table below. 389
(7.55.3) What methods do you use to drive investment in emissions reduction activities? 391
(7.57) Describe your organization’s efforts to reduce methane emissions from your activities. 393
(7.61) Does your organization conduct leak detection and repair (LDAR) or use other methods to find and fix fugitive methane emissions from oil and gas production activities? 393
(7.61.1) Describe the protocol through which methane leak detection and repair or other leak detection methods, are conducted for oil and gas production activities, including predominant frequency of inspections, estimates of assets covered, and methodologies employed. 393
(7.62) If flaring is relevant to your oil and gas production activities, describe your organization’s efforts to reduce flaring, including any flaring reduction targets. 394
(7.73) Are you providing product level data for your organization’s goods or services? 394

(7.74) Do you classify any of your existing goods and/or services as low-carbon products? 394
(7.74.1) Provide details of your products and/or services that you classify as low-carbon products. 394
(7.79) Has your organization retired any project-based carbon credits within the reporting year? 398

C9. Environmental performance - Water security 399

(9.1) Are there any exclusions from your disclosure of water-related data? 399
(9.2) Across all your operations, what proportion of the following water aspects are regularly measured and monitored? 399
(9.2.2) What are the total volumes of water withdrawn, discharged, and consumed across all your operations, how do they compare to the previous reporting year, and how are they forecasted to change? 405
(9.2.3) In your oil & gas sector operations, what are the total volumes of water withdrawn, discharged, and consumed (by business division), how do they compare to the previous reporting year, and how are they forecasted to change? 408
(9.2.4) Indicate whether water is withdrawn from areas with water stress, provide the volume, how it compares with the previous reporting year, and how it is forecasted to change. 418
(9.2.7) Provide total water withdrawal data by source. 419
(9.2.8) Provide total water discharge data by destination. 423
(9.2.9) Within your direct operations, indicate the highest level(s) to which you treat your discharge. 425
(9.2.10) Provide details of your organization's emissions of nitrates, phosphates, pesticides, and other priority substances to water in the reporting year. 428
(9.3) In your direct operations and upstream value chain, what is the number of facilities where you have identified substantive water-related dependencies, impacts, risks, and opportunities? 429
(9.3.1) For each facility referenced in 9.3, provide coordinates, water accounting data, and a comparison with the previous reporting year. 430
(9.3.2) For the facilities in your direct operations referenced in 9.3.1, what proportion of water accounting data has been third party verified? 444
(9.4) Could any of your facilities reported in 9.3.1 have an impact on a requesting CDP supply chain member? 447
(9.5) Provide a figure for your organization's total water withdrawal efficiency. 447
(9.11) Do you calculate water intensity for your activities associated with the oil & gas sector? 448
(9.11.1) Provide water intensity information associated with your activities in the oil & gas sector. 448
(9.12) Provide any available water intensity values for your organization's products or services. 449
(9.13) Do any of your products contain substances classified as hazardous by a regulatory authority? 450
(9.14) Do you classify any of your current products and/or services as low water impact? 450
(9.15) Do you have any water-related targets? 450
(9.15.3) Why do you not have water-related target(s) and what are your plans to develop these in the future? 451

C11. Environmental performance - Biodiversity 452

(11.2) What actions has your organization taken in the reporting year to progress your biodiversity-related commitments? ... 452
(11.3) Does your organization use biodiversity indicators to monitor performance across its activities? ... 452
(11.4) Does your organization have activities located in or near to areas important for biodiversity in the reporting year? ... 453
(11.4.1) Provide details of your organization's activities in the reporting year located in or near to areas important for biodiversity. ... 455

C13. Further information & sign off ... 459

(13.1) Indicate if any environmental information included in your CDP response (not already reported in 7.9.1/2/3, 8.9.1/2/3/4, and 9.3.2) is verified and/or assured by a third party? ... 459
(13.1.1) Which data points within your CDP response are verified and/or assured by a third party, and which standards were used? ... 459
(13.2) Use this field to provide any additional information or context that you feel is relevant to your organization's response. Please note that this field is optional and is not scored. ... 464
(13.3) Provide the following information for the person that has signed off (approved) your CDP response. ... 465
(13.4) Please indicate your consent for CDP to share contact details with the Pacific Institute to support content for its Water Action Hub website. ... 465

C1. Introduction

(1.1) In which language are you submitting your response?

Select from:

☑ English

(1.2) Select the currency used for all financial information disclosed throughout your response.

Select from:

☑ USD

(1.3) Provide an overview and introduction to your organization.

(1.3.2) Organization type

Select from:

☑ Publicly traded organization

(1.3.3) Description of organization

Shareholders of NC KazMunayGas JSC are Samruk-Kazyna Joint Stock Company (67.42%), Ministry of Finance of the Republic of Kazakhstan – (20%), National Bank of the Republic of Kazakhstan (9.58%) and and minority shareholders (3%). JSC National Company KazMunayGas (hereafter - KMG, the Company) is Kazakhstan's leading vertically integrated oil and gas company, operating assets across the entire production cycle from the exploration and production of hydrocarbons to transportation, refining and services. Established in 2002, the Company represents the interests of the Republic of Kazakhstan in the national oil and gas industry. Outside of Kazakhstan, KMG has more than thousand fuel sales points in Romania and Georgia. As a member of the UN Global Compact, KMG recognizes the importance of climate change mitigation actions and intends to contribute to the achievement of SDG 13 "Climate Action". Climate change response and adaptation measures are incorporated in our strategic documents and corporate policies. In 2021, the KMG Development Strategy for a ten-year period was approved. Four strategic goals are built through the prism of sustainable development priorities. One of KMG's strategic goals "Sustainable development and gradual reduction of carbon intensity of production" provides for the improvement of the sustainable development system, which will ensure the integration of ESG principles into the Company's key business processes. In 2021, the Low-Carbon Development Program of JSC NC "KazMunayGas" for the period 2022-2031 (hereinafter - the Program) was developed and approved by the Board of Directors. The Program was developed in accordance with the legislation of the Republic of Kazakhstan, the KMG Charter, the Development Strategy of JSC NC "KazMunayGas" for the period 2022- 2031, the Emissions Management Policy in the group of companies of JSC NC "KazMunayGas", as well as other internal documents of KMG. This Program defines a unified low-carbon development framework as an integrated component of corporate governance and systematizes the Company's activities in the field of carbon footprint reduction. The integration of the low-carbon agenda into the

company's development strategy will not only contribute to the reduction of greenhouse gas emissions, but will also increase the investment attractiveness and competitiveness of the company in the context of the energy transition. The main objective of developing the Program is to identify KMG's climate ambitions, systematize main approaches and measures to reduce its carbon footprint, including, in particular: (i) Analysis of the available capacity and definition of KMG's climate goals. (ii) Identification of key areas of the company's development in the field of decarbonization and measures to achieve the established goals. (iii) Improving the company's capacity and awareness. Since 2020, the Company has been evaluated ESG-rating by the international rating agency "Sustainalytics" (Amsterdam, Netherlands). The key ESG-issues for KMG are carbon emissions from operations and emissions from the use of the Company's products, as well as the relationship with the communities in the regions of operation. KMG intends to continue systematic work to improve the level of ESG-rating and meet the objectives of managing and reducing ESG-risk ratings. Since 2012, the Company has been preparing a Sustainability Report in accordance with international non-financial reporting standards developed by the Global Reporting Initiative (GRI). KMG takes part in the Global Methane Initiative. Reduction of methane emissions is one of the strategic objectives of the Company. JSC NC "KazMunayGas" in 2020 signed a Memorandum on the creation of a joint research platform Caspian Environmental Protection Initiative (CEPI) for international oil companies operating in the Caspian region, in order to protect the environment and combine efforts to prevent emissions of pollutants into environment by developing and implementing joint preventive measures to combat climate change, which threatens the environmental stability factors of the Caspian region. Several global oil and gas companies have joined the initiative, including BP Azerbaijan, Equinor Absheron and Total Absheron. Taking into account the long-term trends in the energy transition, KMG is working towards creating its portfolio of low-carbon projects in order to maintain financial success in a zero- emission world in the future. The Low-Carbon Development Program till 2060 with short-term and medium-term goals is developed and approved in 2024. As part of the implementation of the company's development strategy, in 2023 year KMG have developed the Water Management Program for 10 years period.
[Fixed row]

(1.4) State the end date of the year for which you are reporting data. For emissions data, indicate whether you will be providing emissions data for past reporting years.

(1.4.1) End date of reporting year

12/29/2024

(1.4.2) Alignment of this reporting period with your financial reporting period

Select from:

☑ Yes

(1.4.3) Indicate if you are providing emissions data for past reporting years

Select from:

☑ Yes

(1.4.4) Number of past reporting years you will be providing Scope 1 emissions data for

Select from:

☑ 3 years

(1.4.5) Number of past reporting years you will be providing Scope 2 emissions data for

Select from:

☑ 3 years

(1.4.6) Number of past reporting years you will be providing Scope 3 emissions data for

Select from:

☑ 3 years

[Fixed row]

(1.4.1) What is your organization’s annual revenue for the reporting period?

17750018100

(1.5) Provide details on your reporting boundary.

	Is your reporting boundary for your CDP disclosure the same as that used in your financial statements?
	Select from: ☑ Yes

[Fixed row]

(1.6) Does your organization have an ISIN code or another unique identifier (e.g., Ticker, CUSIP, etc.)?

ISIN code - bond

(1.6.1) Does your organization use this unique identifier?

Select from:

☑ Yes

(1.6.2) Provide your unique identifier

ISIN XS1595713782 (RegS), US48667QAN51 (144A)

ISIN code - equity

(1.6.1) Does your organization use this unique identifier?

Select from:

☑ Yes

(1.6.2) Provide your unique identifier

KZ1C00001122

CUSIP number

(1.6.1) Does your organization use this unique identifier?

Select from:

☑ No

Ticker symbol

(1.6.1) Does your organization use this unique identifier?

Select from:

☑ No

SEDOL code

(1.6.1) Does your organization use this unique identifier?

Select from:

☑ No

LEI number

(1.6.1) Does your organization use this unique identifier?

Select from:

☑ No

D-U-N-S number

(1.6.1) Does your organization use this unique identifier?

Select from:

☑ No

Other unique identifier

(1.6.1) Does your organization use this unique identifier?

Select from:

☑ No

ISIN code - bond

(1.6.1) Does your organization use this unique identifier?

Select from:

☑ Yes

(1.6.2) Provide your unique identifier

ISIN XS1595714087 (RegS), US48667QAP00 (144A)

ISIN code - bond

(1.6.1) Does your organization use this unique identifier?

Select from:

☑ Yes

(1.6.2) Provide your unique identifier

ISIN XS1807300105 (RegS), US48667QAQ82 (144A)

ISIN code - bond

(1.6.1) Does your organization use this unique identifier?

Select from:

☑ Yes

(1.6.2) Provide your unique identifier

ISIN XS1807299331 (RegS), US48667QAS49 (144A)

ISIN code - bond

(1.6.1) Does your organization use this unique identifier?

Select from:

☑ Yes

(1.6.2) Provide your unique identifier

ISIN XS2242422397 (RegS), US48126PAA03 (144A)

ISIN code - bond

(1.6.1) Does your organization use this unique identifier?

Select from:

☑ Yes

(1.6.2) Provide your unique identifier

KZ2C00008969

ISIN code - bond

(1.6.1) Does your organization use this unique identifier?

Select from:

☑ Yes

(1.6.2) Provide your unique identifier

KZ2C00009736

ISIN code - bond

(1.6.1) Does your organization use this unique identifier?

Select from:

☑ Yes

(1.6.2) Provide your unique identifier

KZ2C00010429
[Add row]

(1.7) Select the countries/areas in which you operate.

Select all that apply

☑ Georgia

☑ Kazakhstan

☑ Romania

(1.8) Are you able to provide geolocation data for your facilities?

	Are you able to provide geolocation data for your facilities?
	Select from: ☑ Yes, for all facilities

[Fixed row]

(1.8.1) Please provide all available geolocation data for your facilities.

Row 1

(1.8.1.1) Identifier

ANPZ

(1.8.1.2) Latitude

47.07167

(1.8.1.3) Longitude

51.922426

(1.8.1.4) Comment

The main coordinate points are presented.

Row 2

(1.8.1.1) Identifier

PNHZ

(1.8.1.2) Latitude

52.369977

(1.8.1.3) Longitude

76.912829

(1.8.1.4) Comment

The main coordinate points are presented.

Row 3

(1.8.1.1) Identifier

PKOP

(1.8.1.2) Latitude

42.261354

(1.8.1.3) Longitude

69.656328

(1.8.1.4) Comment

The main coordinate points are presented.

Row 4

(1.8.1.1) Identifier

CaspiBitum

(1.8.1.2) Latitude

43.66479

(1.8.1.3) Longitude

51.280651

(1.8.1.4) Comment

The main coordinate points are presented.

Row 5

(1.8.1.1) Identifier

KazGPZ

(1.8.1.2) Latitude

43.363003

(1.8.1.3) Longitude

53.455447

(1.8.1.4) Comment

The main coordinate points are presented.

Row 6

(1.8.1.1) Identifier

EMG (Dossor)

(1.8.1.2) Latitude

47.651546

(1.8.1.3) Longitude

53.455447

(1.8.1.4) Comment

The main coordinate points are presented by region

Row 7

(1.8.1.1) Identifier

EMG (Zhayik)

(1.8.1.2) Latitude

47.100739

(1.8.1.3) Longitude

51.013796

(1.8.1.4) Comment

The main coordinate points are presented by region

Row 8

(1.8.1.1) Identifier

EMG (Zhylyoi)

(1.8.1.2) Latitude

45.87659

(1.8.1.3) Longitude

53.142643

(1.8.1.4) Comment

The main coordinate points are presented by region

Row 9

(1.8.1.1) Identifier

EMG (Kainar)

(1.8.1.2) Latitude

47.916462

(1.8.1.3) Longitude

53.771563

(1.8.1.4) Comment

The main coordinate points are presented by region

Row 10

(1.8.1.1) Identifier

OMG

(1.8.1.2) Latitude

43.453605

(1.8.1.3) Longitude

52.750559

(1.8.1.4) Comment

The main coordinate points are presented.

Row 11

(1.8.1.1) Identifier

MMG

(1.8.1.2) Latitude

43.51623

(1.8.1.3) Longitude

52.11558

(1.8.1.4) Comment

The main coordinate points are presented.

Row 12

(1.8.1.1) Identifier

KGM

(1.8.1.2) Latitude

45.95236

(1.8.1.3) Longitude

65.724758

(1.8.1.4) Comment

The main coordinate points are presented.

Row 13

(1.8.1.1) Identifier

KBM

(1.8.1.2) Latitude

45.135109

(1.8.1.3) Longitude

51.396422

(1.8.1.4) Comment

The main coordinate points are presented.

Row 14

(1.8.1.1) Identifier

KOA

(1.8.1.2) Latitude

48.476148

(1.8.1.3) Longitude

57.668722

(1.8.1.4) Comment

The main coordinate points are presented.

Row 15

(1.8.1.1) Identifier

KTM

(1.8.1.2) Latitude

45.954551

(1.8.1.3) Longitude

53.906181

(1.8.1.4) Comment

The main coordinate points are presented.

Row 16

(1.8.1.1) Identifier

Dunga

(1.8.1.2) Latitude

44.05549

(1.8.1.3) Longitude

51.056593

(1.8.1.4) Comment

The main coordinate points are presented.

Row 17

(1.8.1.1) Identifier

Magistralnyi Vodovod

(1.8.1.2) Latitude

46.670571

(1.8.1.3) Longitude

48.492035

(1.8.1.4) Comment

The main coordinate points are presented.

Row 18

(1.8.1.1) Identifier

KPI

(1.8.1.2) Latitude

47.339425

(1.8.1.3) Longitude

52.26961

(1.8.1.4) Comment

The main coordinate points are presented.

Row 19

(1.8.1.1) Identifier

Urikhtau

(1.8.1.2) Latitude

48.389245

(1.8.1.3) Longitude

57.358331

(1.8.1.4) Comment

The main coordinate points are presented.

Row 20

(1.8.1.1) Identifier

UOG

(1.8.1.2) Latitude

51.653733

(1.8.1.3) Longitude

52.340583

(1.8.1.4) Comment

The main coordinate points are presented.

Row 21

(1.8.1.1) Identifier

Vega

(1.8.1.2) Latitude

44.963434

(1.8.1.3) Longitude

26.023906

(1.8.1.4) Comment

The main coordinate points are presented.

Row 22

(1.8.1.1) Identifier

Petromidia

(1.8.1.2) Latitude

44.342478

(1.8.1.3) Longitude

28.647959

(1.8.1.4) Comment

The main coordinate points are presented.

Row 23

(1.8.1.1) Identifier

Batumi Oil Terminal

(1.8.1.2) Latitude

41.649858

(1.8.1.3) Longitude

41.658128

(1.8.1.4) Comment

The main coordinate points are presented.

Row 24

(1.8.1.1) Identifier

KTO

(1.8.1.2) Latitude

51.112106

(1.8.1.3) Longitude

71.398145

(1.8.1.4) Comment

The main coordinate points in Astana are presented.

Row 25

(1.8.1.1) Identifier

KMTF
[Add row]

(1.19) In which part of the oil and gas value chain does your organization operate?

Oil and gas value chain

☑ Chemicals

☑ Downstream

☑ Midstream

☑ Upstream

(1.24) Has your organization mapped its value chain?

(1.24.1) Value chain mapped

Select from:

☑ Yes, we have mapped or are currently in the process of mapping our value chain

(1.24.2) Value chain stages covered in mapping

Select all that apply

☑ Upstream value chain

(1.24.3) Highest supplier tier mapped

Select from:

☑ Tier 1 suppliers

(1.24.4) Highest supplier tier known but not mapped

Select from:

☑ Tier 2 suppliers

(1.24.7) Description of mapping process and coverage

KMG's sustainable development principles are reflected in its cooperation with contractors based on legality and transparency, compliance with contract conditions, incorruptibility and intolerance of any instances of corruption, and in selection of contractors based on a combination of the following factors: best price, quality and conditions, and contractor's goodwill. At that, KMG requires the contractors to makes reciprocal commitments to comply with applicable laws, treat employees fairly, not use child labour, ensure safe working conditions, protect the environment and adhere to other principles of ethical conduct. These conditions are included in the conditions of contracts concluded by KMG with its contractors in order to respect labour rights and create favourable working conditions for citizens of the Republic of Kazakhstan, protect children's rights and ensure environmental safety According to KMG, these actions will help reduce the number of cases of misconduct by companies cooperating with KMG. At the same time the procurement process is controlled by a shareholder Samruk-Kazyna JSC.
[Fixed row]

(1.24.1) Have you mapped where in your direct operations or elsewhere in your value chain plastics are produced, commercialized, used, and/or disposed of?

	Plastics mapping	Primary reason for not mapping plastics in your value chain	Explain why your organization has not mapped plastics in your value chain
	Select from: ☑ No, but we plan to within the next two years	*Select from:* ☑ Other, please specify :According to preliminary estimates, plastic is used in an insignificant amount	*According to preliminary estimates, plastic is used in an insignificant amount*

[Fixed row]

C2. Identification, assessment, and management of dependencies, impacts, risks, and opportunities

(2.1) How does your organization define short-, medium-, and long-term time horizons in relation to the identification, assessment, and management of your environmental dependencies, impacts, risks, and opportunities?

Short-term

(2.1.1) From (years)

0

(2.1.3) To (years)

1

(2.1.4) How this time horizon is linked to strategic and/or financial planning

Short-term time horizons are determined based on the information in the Cash Budget Form, which includes income and expenses of the company, affecting the possibility of occurrence and prevention of risk. Short-term horizons are determined on the basis of annual and current plans of production activities and development of the company, which determine the position of the Company, promptly responding to global challenges and meeting the requirements of sustainable development.

Medium-term

(2.1.1) From (years)

1

(2.1.3) To (years)

5

(2.1.4) How this time horizon is linked to strategic and/or financial planning

Medium-term planning corresponds to the KMG Group Development Plan and business plans of subsidiaries and affiliates, which are adopted for a 5-year period. In addition, the Nationally Determined Contribution to the global response to climate change (or NDCs) is one of the main documents that is used to build medium term strategic vision.

Long-term

(2.1.1) From (years)

5

(2.1.2) Is your long-term time horizon open ended?

Select from:

☑ No

(2.1.3) To (years)

10

(2.1.4) How this time horizon is linked to strategic and/or financial planning

The long-term horizons are determined on the basis of KMG's development strategy for 2022-2031, which defines the Company's target state, promptly responding to global challenges and meeting the requirements of sustainable development. With long-term energy transition trends in mind, KMG is building its portfolio of low-carbon projects in order to maintain future financial success in a zero- emissions world. As part of long-term planning, the Low-Carbon Development Program until 2060 with specific goals was developed and approved in 2024; it replaced the KMG Low-Carbon Development Program for the period 2022-2031. Long-term horizons are also defined in accordance with the goals and principles set out in the Strategy of the Republic of Kazakhstan to achieve carbon neutrality until 2060.
[Fixed row]

(2.2) Does your organization have a process for identifying, assessing, and managing environmental dependencies and/or impacts?

	Process in place	Dependencies and/or impacts evaluated in this process
	Select from: ☑ Yes	*Select from:* ☑ Both dependencies and impacts

[Fixed row]

(2.2.1) Does your organization have a process for identifying, assessing, and managing environmental risks and/or opportunities?

	Process in place	Risks and/or opportunities evaluated in this process	Is this process informed by the dependencies and/or impacts process?
	Select from: ☑ Yes	*Select from:* ☑ Both risks and opportunities	*Select from:* ☑ Yes

[Fixed row]

(2.2.2) Provide details of your organization's process for identifying, assessing, and managing environmental dependencies, impacts, risks, and/or opportunities.

Row 1

(2.2.2.1) Environmental issue

Select all that apply

☑ Climate change

(2.2.2.2) Indicate which of dependencies, impacts, risks, and opportunities are covered by the process for this environmental issue

Select all that apply

☑ Dependencies

☑ Impacts

☑ Risks

☑ Opportunities

(2.2.2.3) Value chain stages covered

Select all that apply

☑ Direct operations

☑ Upstream value chain

☑ Downstream value chain

(2.2.2.4) Coverage

Select from:

☑ Partial

(2.2.2.5) Supplier tiers covered

Select all that apply

☑ Tier 1 suppliers

(2.2.2.7) Type of assessment

Select from:

☑ Qualitative and quantitative

(2.2.2.8) Frequency of assessment

Select from:

☑ More than once a year

(2.2.2.9) Time horizons covered

Select all that apply

☑ Short-term

☑ Medium-term

☑ Long-term

(2.2.2.10) Integration of risk management process

Select from:

☑ Integrated into multi-disciplinary organization-wide risk management process

(2.2.2.11) Location-specificity used

Select all that apply

☑ Site-specific

☑ National

(2.2.2.12) Tools and methods used

Enterprise Risk Management

☑ Enterprise Risk Management

☑ ISO 31000 Risk Management Standard

International methodologies and standards

☑ Environmental Impact Assessment

☑ ISO 14001 Environmental Management Standard

(2.2.2.13) Risk types and criteria considered

Acute physical

☑ Cold wave/frost

☑ Drought

☑ Heat waves

☑ Heavy precipitation (rain, hail, snow/ice)

Chronic physical

☑ Water stress

Policy

☑ Carbon pricing mechanisms

☑ Changes to international law and bilateral agreements

☑ Changes to national legislation

(2.2.2.14) Partners and stakeholders considered

Select all that apply

☑ Customers

☑ Employees

☑ Investors

☑ Suppliers

(2.2.2.15) Has this process changed since the previous reporting year?

Select from:

☑ No

(2.2.2.16) Further details of process

Climate risk management is a comprehensive, company-wide process aimed at identifying and controlling risks to ensure organizational growth and compliance with regulations. It consists of four main parts: 1. Identification: This phase involves recognizing potential climate-related risks across all KMG Group activities that could hinder the achievement of objectives. Risk Owners and Risk Factor Owners at all management levels are responsible for this identification using a variety of techniques. The procedures and tools for risk identification are detailed in internal risk management documents. 2. Assessment and Analysis: Identified risk factors

are assessed to determine their potential impact on the company's performance indicators. This involves analyzing both production and non-production risks based on their likelihood and potential damage. The company prioritizes quantitative methods for risk assessment and analysis, with methodologies outlined in risk management documents. 3. Risk Management: Risk owners develop controls, including policies and procedures, to manage production and non-production risks effectively. This phase includes establishing a risk management plan that ensures a unified approach across the organization. Business Continuity Plans are created for risks that could disrupt operations, considering factors like natural disasters and supply chain vulnerabilities. The overall risk profile of the company is monitored to ensure it remains within acceptable limits. 4. Monitoring and Reporting: Ongoing monitoring of risk management effectiveness is conducted quarterly, analyzing changes in risk parameters and the implementation of action plans. Responsible divisions collect information from Risk Owners to inform management bodies about risk dynamics as part of risk reporting. In 2023, KMG had a technical analysis supported by the EBRD to identify key climate risk factors under various scenarios and to prepare a disclosure report in line with TCFD recommendations. This effort aims to better manage climate-related risks and establish measurable climate indicators for investment planning and strategic action on climate change. In 2024, we continued to assess risks taking into account the TCFD recommendations.

Row 2

(2.2.2.1) Environmental issue

Select all that apply

☑ Water

(2.2.2.2) Indicate which of dependencies, impacts, risks, and opportunities are covered by the process for this environmental issue

Select all that apply

☑ Dependencies

☑ Impacts

☑ Risks

☑ Opportunities

(2.2.2.3) Value chain stages covered

Select all that apply

☑ Direct operations

☑ Upstream value chain

☑ Downstream value chain

(2.2.2.4) Coverage

Select from:

☑ Partial

(2.2.2.5) Supplier tiers covered

Select all that apply

☑ Tier 1 suppliers

(2.2.2.7) Type of assessment

Select from:

☑ Qualitative and quantitative

(2.2.2.8) Frequency of assessment

Select from:

☑ More than once a year

(2.2.2.9) Time horizons covered

Select all that apply

☑ Short-term

☑ Medium-term

☑ Long-term

(2.2.2.10) Integration of risk management process

Select from:

☑ Integrated into multi-disciplinary organization-wide risk management process

(2.2.2.11) Location-specificity used

Select all that apply

☑ Site-specific

☑ National

(2.2.2.12) Tools and methods used

Commercially/publicly available tools

☑ WRI Aqueduct

International methodologies and standards

☑ Environmental Impact Assessment

☑ ISO 14001 Environmental Management Standard

(2.2.2.13) Risk types and criteria considered

Acute physical

☑ Pollution incident

Chronic physical

☑ Water stress

Policy

☑ Increased pricing of water

☑ Changes to national legislation

☑ Regulation of discharge quality/volumes

☑ Increased difficulty in obtaining operations permits

☑ Changes to international law and bilateral agreements

☑ Increased difficulty in obtaining water withdrawals permit

☑ Mandatory water efficiency, conservation, recycling, or process standards

(2.2.2.14) Partners and stakeholders considered

Select all that apply

☑ Customers

☑ Employees

☑ Investors

☑ Regulators

☑ Suppliers

(2.2.2.15) Has this process changed since the previous reporting year?

Select from:

☑ No

(2.2.2.16) Further details of process

KMG considers key stakeholders to ensure sustainable use of water sources and continuous access to all of Water availability. To assess the effectiveness of our water management strategies, we conduct comparative assessments of tools and processes, benchmark against peers and share best practices. We also track actual water usage at each site as well as projects that were completed to reduce consumption. Stakeholders are engaged at local level, as well as regulators, other users, local authorities, employees, suppliers and customers. In accordance with the Corporate Water Standard, the company on an annual basis assesses the realized and new potential risks in terms of the use of water resources. Methods for identifying risk factors include analysis of production / non-production processes, industry and international comparisons, collection and analysis of statistical data, analysis of the existing database of realized risk events, analysis of reporting, individual expert methods (interviewing) and group expert opinions. Monitoring is carried out by the responsible division of KMG through the quarterly collection of information on the dynamics of risks and the implementation of action plans and control procedures for their management. Companies in the oil and gas industry may face the risk of reduced water availibility depending on their location, leading to related costs. Extracting water from water-stresses regions or potential water contamination can also create tentions witj local communities. For example, for KMG International, there are no serious concerns regarding water resource availibility (medium-low risk) to further significantly impact KMG International financially, however authorities restrictions may be a medium future risk. The stages of the process for identifyinh significant impacts, risks, and opportunities related to water resiurces include: Data Collection and Analysis is performed on: - Water Cources: Identification of water sources used. - Water Usage: Monitoring the quantities od water used in differentt operational processes and identifying the potential for recycling/resuing. - Water Quality: Evaluating the quality of water before and after use, as well as treating wastewater for recycling/reuse/disposal. Idenrtification of Risks and Impact Evaluation related to water include identifying risks related to water supply interuptions and evaluaying their impact on operations. Identification of opportunities rely to water use efficiancy: implementing yechnologies and practices that reduce water consumption, and improving the system for reusing treated water to conserve resources and reduce dependence on external sources. Stakeholder consultation related to water management include both: Regulatory Authorities and Business Partners.

Row 3

(2.2.2.1) Environmental issue

Select all that apply

☑ Biodiversity

(2.2.2.2) Indicate which of dependencies, impacts, risks, and opportunities are covered by the process for this environmental issue

Select all that apply

☑ Dependencies
☑ Impacts
☑ Risks
☑ Opportunities

(2.2.2.3) Value chain stages covered

Select all that apply
☑ Direct operations
☑ Upstream value chain
☑ Downstream value chain

(2.2.2.4) Coverage

Select from:
☑ Partial

(2.2.2.5) Supplier tiers covered

Select all that apply
☑ Tier 1 suppliers

(2.2.2.7) Type of assessment

Select from:
☑ Qualitative and quantitative

(2.2.2.8) Frequency of assessment

Select from:
☑ More than once a year

(2.2.2.9) Time horizons covered

Select all that apply

☑ Short-term

☑ Medium-term

☑ Long-term

(2.2.2.10) Integration of risk management process

Select from:

☑ Integrated into multi-disciplinary organization-wide risk management process

(2.2.2.11) Location-specificity used

Select all that apply

☑ Site-specific

☑ National

(2.2.2.12) Tools and methods used

International methodologies and standards

☑ Environmental Impact Assessment

☑ ISO 14001 Environmental Management Standard

(2.2.2.13) Risk types and criteria considered

Chronic physical

☑ Soil degradation

☑ Soil erosion

☑ Water stress

☑ Water quality at a basin/catchment level

(2.2.2.14) Partners and stakeholders considered

Select all that apply

☑ Customers

☑ Employees

☑ Investors

(2.2.2.15) Has this process changed since the previous reporting year?

Select from:

☑ No

(2.2.2.16) Further details of process

The company has an environmental policy that provides for risk management in the field of environmental protection, and the adoption of all possible measures to reduce the impact of taking into account the impact on biodiversity and preserving the migration path of animals in the planning and implementation of production activities. KMG Group sped not carry out activities that have a direct impact on biodiversity or ecosystems. We are developing a biodiversity conservation program in the KMG group of companies with the aim of reducing the impact on biodiversity. More than 100,000 trees were planted in the regions of presence, as well as about 4.5 million saxaul seedlings on the bottom of the Aral Sea as part pf the sustainable development strategy to mitigate the impact to climate change and biodiversity loss.
[Add row]

(2.2.7) Are the interconnections between environmental dependencies, impacts, risks and/or opportunities assessed?

(2.2.7.1) Interconnections between environmental dependencies, impacts, risks and/or opportunities assessed

Select from:

☑ Yes

(2.2.7.2) Description of how interconnections are assessed

KMG evaluates the interconnections between environmental dependencies, impacts, risks, and opportunities. This process includes: Identification of environmental dependencies: Determining the resources and ecosystem services that our operations rely on. Assessment of environmental impacts: Analyzing how our activities affect the environment, including greenhouse gas emissions, water usage, and land use. Analysis of risks and opportunities: Evaluating potential business risks associated with climate change and other environmental factors, as well as identifying opportunities to enhance resilience and efficiency. In KMG's Low-carbon development program, Water managment programe and biodiversity conservation, we specifically assess climate-related physical and transition risks, opportunities,

and dependencies. Also, these assessments are integrated into our corporate risk management system in accordance with international standards such as the Task Force on Climate-related Financial Disclosures (TCFD) The CEO Water Mandate Driving Harmonization of Water Related Terminology, Recommendations of the Taskforce on Nature-related Financial Disclosures (TNFD) and the ISO 31000 and 14001. These comprehensive evaluations help us better understand and manage our environmental risks and opportunities, and demonstrate our commitment to sustainable development to stakeholders.
[Fixed row]

(2.3) Have you identified priority locations across your value chain?

(2.3.1) Identification of priority locations

Select from:

☑ Yes, we have identified priority locations

(2.3.2) Value chain stages where priority locations have been identified

Select all that apply

☑ Direct operations

(2.3.3) Types of priority locations identified

Sensitive locations

☑ Areas of limited water availability, flooding, and/or poor quality of water

Locations with substantive dependencies, impacts, risks, and/or opportunities

☑ Locations with substantive dependencies, impacts, risks, and/or opportunities relating to water

(2.3.4) Description of process to identify priority locations

According to studies conducted and published by the World Resource Institute (WRI), Kazakhstan is classified as a critical level of water resource exploitation and a very high level of water stress is predicted in the next 15-20 years. The Company also analyses and records the facilities of KMG SDEs located in regions with increased water scarcity according to WRI Aqueduct 1, relating to the basins of the Caspian Sea, the Syrdarya and the Ural Rivers. In regions with high water scarcity, KMG is developing water management actions to use less fresh water, increase recycled water and closely monitor water use. At the same time, we note that the need for water resources in production activities is a prerequisite for technological processes.

(2.3.5) Will you be disclosing a list/spatial map of priority locations?

Select from:

☑ No, we have a list/geospatial map of priority locations, but we will not be disclosing it

[Fixed row]

(2.4) How does your organization define substantive effects on your organization?

Risks

(2.4.1) Type of definition

Select all that apply

☑ Quantitative

(2.4.2) Indicator used to define substantive effect

Select from:

☑ EBITDA

(2.4.3) Change to indicator

Select from:

☑ % increase

(2.4.4) % change to indicator

Select from:

☑ 1-10

(2.4.6) Metrics considered in definition

Select all that apply

☑ Frequency of effect occurring

☑ Time horizon over which the effect occurs

☑ Likelihood of effect occurring

(2.4.7) Application of definition

Risk management in the Company allows to prevent the occurrence of risk events that affect the achievement of strategic and operational goals, and limit their impact when they occur. Risk management is an integral part of the Company's strategic planning and corporate governance process and maintaining financial stability. KMG has integrated the Corporate Risk Management System (CSMS) into the Company's key business and management processes. CSMS is a key component of the corporate governance system aimed at timely identification, assessment and monitoring of all significant risks, as well as taking timely and adequate measures to reduce the level of risks. According to the Risk Identification and Assessment Methodology (KMG-MD-986.3-37), the risk propensity is calculated in quantitative and qualitative terms. When calculating the propensity to risk, a reduction in the total amount of cash flows and an increase in the total amount of cash outflow provided for in the cash budget for the forecast period are taken into account. Quantitative risk assessment is carried out on the basis of a database of realized risk events, accumulated internal and external statistics. The main methods of risk assessment within the framework of this approach: - cost at risk (Value-at risk - VaR) - the maximum reduction in the cost of a financial investment on a certain planning horizon (for example, a month), which will not be exceeded with a high (predetermined) probability (usually 95% - VaR95% or 99% - VaR99%). The value of VaR has a monetary expression; - cash flows at risk (Cash-flowatrisk - CFaR) - the maximum decrease in the amount of cash receipts (or the maximum increase in expenses) caused by the impact of one or more risk factors, which will not be exceeded with a high (predetermined) probability (usually 95% or 99%) on a certain planning horizon. A major (significant) risk of the company is considered to be a risk that scores above the value of 50-75% of the quantitative risk appetite. KMG has an internal audit service (IAS), which evaluates the effectiveness of the risk management process, notifieshe Board of Directors of KMG of significant impacts in the KMG CSMS, and also develops recommendations for improving the risk management process; evaluates the effectiveness of preventive measures on the risk/risk factor (control procedures) and prepares recommendations for elimination identified deficiencies (if necessary).

Opportunities

(2.4.1) Type of definition

Select all that apply

☑ Quantitative

(2.4.2) Indicator used to define substantive effect

Select from:

☑ Direct operating costs

(2.4.3) Change to indicator

Select from:

☑ Absolute increase

(2.4.5) Absolute increase/ decrease figure

0

(2.4.6) Metrics considered in definition

Select all that apply

☑ Frequency of effect occurring

☑ Time horizon over which the effect occurs

☑ Likelihood of effect occurring

(2.4.7) Application of definition

Risk management in the Company allows to prevent the occurrence of risk events that affect the achievement of strategic and operational goals, and limit their impact when they occur. Risk management is an integral part of the Company's strategic planning and corporate governance process and maintaining financial stability. KMG has integrated the Corporate Risk Management System (CSMS) into the Company's key business and management processes. CSMS is a key component of the corporate governance system aimed at timely identification, assessment and monitoring of all significant risks, as well as taking timely and adequate measures to reduce the level of risks. According to the Risk Identification and Assessment Methodology (KMG-MD-986.3-37), the risk propensity is calculated in quantitative and qualitative terms. When calculating the propensity to risk, a reduction in the total amount of cash flows and an increase in the total amount of cash outflow provided for in the cash budget for the forecast period are taken into account. Quantitative risk assessment is carried out on the basis of a database of realized risk events, accumulated internal and external statistics. The main methods of risk assessment within the framework of this approach: - cost at risk (Value-at risk - VaR) - the maximum reduction in the cost of a financial investment on a certain planning horizon (for example, a month), which will not be exceeded with a high (predetermined) probability (usually 95% - VaR95% or 99% - VaR99%). The value of VaR has a monetary expression; - cash flows at risk (Cash-flowatrisk - CFaR) - the maximum decrease in the amount of cash receipts (or the maximum increase in expenses) caused by the impact of one or more risk factors, which will not be exceeded with a high (predetermined) probability (usually 95% or 99%) on a certain planning horizon. A major (significant) risk of the company is considered to be a risk that scores above the value of 50-75% of the quantitative risk appetite. KMG has an internal audit service (IAS), which evaluates the effectiveness of the risk management process, notifieshe Board of Directors of KMG of significant impacts in the KMG CSMS, and also develops recommendations for improving the risk management process; evaluates the effectiveness of preventive measures on the risk/risk factor (control procedures) and prepares recommendations for elimination identified deficiencies (if necessary).
[Add row]

(2.5) Does your organization identify and classify potential water pollutants associated with its activities that could have a detrimental impact on water ecosystems or human health?

(2.5.1) Identification and classification of potential water pollutants

Select from:

☑ Yes, we identify and classify our potential water pollutants

(2.5.2) How potential water pollutants are identified and classified

The identification and classification of pollutants during water discharges is carried out on the basis of the approved requirements of the legislation of the Republic of Kazakhstan, Romania and Georgia. The standards for maximum permissible discharges of pollutants with wastewater into surface water bodies, terrain, filtration fields and wastewater storage are calculated for each wastewater outlet. The list of discharge outlets and their characteristics are determined on the basis of an inventory of outlets, which is accompanied by sampling and analytical studies. Along with the maximum permissible discharges, annual values of permissible discharges (limits) are set in tons per year for each discharge outlet and the enterprise as a whole. The list of pollutants is determined by the authorized state body. The KMG Group of Companies operates in accordance with the obtained permission for a certain period, in the absence of changes in technological processes that could affect the volume of wastewater discharged. According to the requirements established in the project and agreed with the state body, KMG enterprises conduct monitoring and, as per the form established by the legislation, the enterprises submit reports to the authorized body on a quarterly basis, which takes into account all sources of impact on water resources (control points), names of pollutants, established standards, the actual result of monitoring, and measures to eliminate violations (if any). Regarding the water management strategy, it is based on rigorous monitoring and verification processes. We ensure that all specific pollutants as mentioned in our permits, are carefully monitored at varying frequencies, including daily, weekly, monthly and quarterly assessments. In addition, the inspection and maintenance of wastewater transport facilities are prioritized, along with sealing and isolating structures \ basins to prevent potential leaks or contamination. This heightened attention to infrastructure integrity is essential to minimizing the impact of our operations on the environment. We regularly report water emissions, using specific objectives to monitor and demonstrate progress in our water management practices. Our principles for managing he discharge of treated water are designed to ensure the highest environmental protection standards. We strive to keep emissions to water below the limits specified in our Water Management Permit, ensuring the maintenance of water quality.
[Fixed row]

(2.5.1) Describe how your organization minimizes the adverse impacts of potential water pollutants on water ecosystems or human health associated with your activities.

Row 1

(2.5.1.1) Water pollutant category

Select from:

☑ Oil

(2.5.1.2) Description of water pollutant and potential impacts

Hydrocarbons are an integral part of the oil production, transportation and refining process. Oil spills or wastewater discharges release hydrocarbons into the environment and can affect it. The potential impact of hydrocarbons on the aquatic environment will depend on the scale of oil spills or emergencies. Hydrocarbons can affect marine / river habitats (fish, birds, plankton), microflora, algae, etc. Contamination of the coastline, bottom sediments, soil and groundwater is possible. Potential impacts from oil spills or emergencies are described in the draft assessment of impact by enterprises on the environment.

(2.5.1.3) Value chain stage

Select all that apply

☑ Direct operations

☑ Upstream value chain

☑ Downstream value chain

(2.5.1.4) Actions and procedures to minimize adverse impacts

Select all that apply

☑ Assessment of critical infrastructure and storage condition (leakages, spillages, pipe erosion etc.) and their resilience

☑ Industrial and chemical accidents prevention, preparedness, and response

☑ Upgrading of process equipment/methods

(2.5.1.5) Please explain

Continuous oil spill response (OSR) readiness is an absolute priority for us. We impose high requirements to the environmental safety during oil operations: prior to commencement of any type of work, we conduct environmental studies in contract areas and assess our potential social and environmental impact, as well as monitor the impact, monitor emissions and monitor emergency situations - during and after operations. Representatives of the company were included in the Working Group to develop an environmental sensitivity map and make a decision to determine the sensitivity index for oil spill response at sea, inland waters and in the buffer zone of the Republic of Kazakhstan. As part of the Oil Spill Response (OSR) Volunteer Development Program, KMG System&Services LLP organized a training session of June 22, 2024, for the 16th and 17th Groups of volunteers. University students from the city of Aktau participated in the training. The program is aimed at developing oil spill response skills and increasing public engagement in the regions"s environmental safety.

Row 2

(2.5.1.1) Water pollutant category

Select from:

☑ Other, please specify :Chemicals

(2.5.1.2) Description of water pollutant and potential impacts

The content of various chemicals in wastewater, their volumes and the frequency of penetration into surface and ground water bodies depends on the initial composition of natural water components, on the use of acids for cleaning the bottomhole in oil and gas production, on the operating mode and on the quality of wastewater treatment.

(2.5.1.3) Value chain stage

Select all that apply

☑ Direct operations

☑ Upstream value chain

☑ Downstream value chain

(2.5.1.4) Actions and procedures to minimize adverse impacts

Select all that apply

☑ Water recycling

☑ Upgrading of process equipment/methods

(2.5.1.5) Please explain

In order to improve the efficiency of water resources use, reduce the volume of fresh water consumption, increase the volume of recycling and reuse of treated wastewater, the following actions are being taken and are planned to be taken on a permanent basis in KMG SDEs: - update, reconstruction of existing units for mechanical, chemical and biological treatment of domestic wastewater, replacement of old treatment equipment with more modern modular units; - design of works to reconstruct evaporation fields; - retrofitting of treatment plants with additional technologies (reverse osmosis), which will subsequently make it possible to use this water to produce steam for industrial needs; - replacement of old drinking water pipelines with new ones to reduce leaks and process losses of fresh drinking water; - reconstruction of mechanical treatment facilities (MTF) within the framework of the TAZALYQ project, which was increased the capacity of MTF by 2 times and achieve the maximum permissible discharge limits for the content of oil products and suspended solids in wastewater sent to the biological treatment unit. - reconstruction of regulatory treated effluent canal and reclamation of Atyrau Refinery evaporation fields; - construction of a wastewater post-treatment unit using reverse osmosis under the TAZALYQ project; - complete reconstruction and update of the system of wastewater treatment facilities of PetroKazakhstan Oil Products LLP, subsequently
[Add row]

C3. Disclosure of risks and opportunities

(3.1) Have you identified any environmental risks which have had a substantive effect on your organization in the reporting year, or are anticipated to have a substantive effect on your organization in the future?

Climate change

(3.1.1) Environmental risks identified

Select from:

☑ Yes, both in direct operations and upstream/downstream value chain

Water

(3.1.1) Environmental risks identified

Select from:

☑ Yes, both in direct operations and upstream/downstream value chain

Plastics

(3.1.1) Environmental risks identified

Select from:

☑ No

(3.1.2) Primary reason why your organization does not consider itself to have environmental risks in your direct operations and/or upstream/downstream value chain

Select from:

☑ Other, please specify :Information about of plastic risk is not consider to our operation because of our activities.

(3.1.3) Please explain

Information about of plastic risk is not consider to our operation because of our activities.
[Fixed row]

(3.1.1) Provide details of the environmental risks identified which have had a substantive effect on your organization in the reporting year, or are anticipated to have a substantive effect on your organization in the future.

Climate change

(3.1.1.1) Risk identifier

Select from:
☑ Risk1

(3.1.1.3) Risk types and primary environmental risk driver

Policy
☑ Carbon pricing mechanisms

(3.1.1.4) Value chain stage where the risk occurs

Select from:
☑ Direct operations

(3.1.1.6) Country/area where the risk occurs

Select all that apply
☑ Kazakhstan

(3.1.1.9) Organization-specific description of risk

Fluctuations in carbon pricing can significantly affect operational costs and financial planning. 14 KMG subsidiary entities are covered by Kazakhstan Emissions Trading System and 2 subsidiary entities are covered by European Emissions Trading System, therefore the risks of current regulation are included in the KMG Key Risk Map, assessed and identified as political and regulatory factors. As an oil and gas company, thr Company is a subject to the regulatory requirements of the Environmental Code of the Republic of Kazakhstan (RoK) related to climate change, including the Kazakhstan Emissions Trading System, the requirements of the RoK Law "On Energy Efficiency and Energy Conservation Improvement", the RoK Law "On Support for Renewable Energy Development". The Company complies with legislative requirements closely monitors and assesses risks associated with any changes by incorporating them into our enterprise risk management process. Also, we take into account the risks associated with the transition of the global economy to a low-carbon development path and with the measures taken in the countries where the Group operates to tighten regulation of greenhouse gas emissions and assess the necessary financial costs.

(3.1.1.11) Primary financial effect of the risk

Select from:

☑ Increased direct costs

(3.1.1.12) Time horizon over which the risk is anticipated to have a substantive effect on the organization

Select all that apply

☑ Medium-term

(3.1.1.13) Likelihood of the risk having an effect within the anticipated time horizon

Select from:

☑ Very likely

(3.1.1.14) Magnitude

Select from:

☑ High

(3.1.1.16) Anticipated effect of the risk on the financial position, financial performance and cash flows of the organization in the selected future time horizons

KMG considers transitional climate risks (Policy and Legal, Technology, Market, Reputation). For example, the introduction of carbon pricing mechanisms to reduce greenhouse gas emissions; the transition of the state to the method of allocating allowances only using specific emission factors, as a result of which some enterprises may have a shortage of allowances; reducing energy consumption to reduce emissions; making energy-efficient solutions; strengthening measures to improve water efficiency and promoting more sustainable land use practices.

(3.1.1.17) Are you able to quantify the financial effect of the risk?

Select from:

☑ Yes

(3.1.1.21) Anticipated financial effect figure in the medium-term – minimum (currency)

11323985

(3.1.1.22) Anticipated financial effect figure in the medium-term – maximum (currency)

15654123

(3.1.1.25) Explanation of financial effect figure

The minimum costs include the purchase of a carbon credit shortfall, which is calculated from the forecast cost of carbon credits until 2030. The maximum costs include the payment of penalties for exceeding the amount of credits for GHG emissions until 2030 and the cost of electricity, including its rise due to increasing carbon prices.

(3.1.1.26) Primary response to risk

Pricing and credits

☑ Promotion/purchase of carbon credits

(3.1.1.27) Cost of response to risk

664000000

(3.1.1.28) Explanation of cost calculation

KMG has developed a LCDP till 2060, which includes a direction to improve the energy efficiency of the Company and covers all business areas. Also KMG together with Partners is going to build 2 RES. The total implementation budget (CAPEX) is approximately 664 million USD. The GHG emission reduction effect is 1.05 mln tCO2.

(3.1.1.29) Description of response

KMG, while modeling the costs of the risk of increasing the price of carbon, considers the hard option, as the results of preliminary estimates indicate that at current prices for CO2 ($ 1 per ton), the Republic of Kazakhstan will not be able to achieve Nationally Determined Contributions (NDCs). In this regard, KMG expects a tightening of carbon regulation, which will drive the growth of prices in the carbon market. In turn, the rising cost of carbon regulation will lead to an increase in prices for energy resources. Thus, the total portfolio of available measures (energy efficiency + renewables) currently has a small reserve compared to the Company's GHG emission reduction target (reduction of 1.62 mln tCO2 by 2031).

Water

(3.1.1.1) Risk identifier

Select from:

☑ Risk1

(3.1.1.3) Risk types and primary environmental risk driver

Acute physical

☑ Pollution incident

(3.1.1.4) Value chain stage where the risk occurs

Select from:

☑ Direct operations

(3.1.1.6) Country/area where the risk occurs

Select all that apply

☑ Kazakhstan

(3.1.1.7) River basin where the risk occurs

Select all that apply

☑ Ural

(3.1.1.9) Organization-specific description of risk

The risk of oil spills during offshore operations was identified as a low probability risk, but disastrous when implemented

(3.1.1.11) Primary financial effect of the risk

Select from:

☑ Fines, penalties or enforcement orders

(3.1.1.12) Time horizon over which the risk is anticipated to have a substantive effect on the organization

Select all that apply

☑ Medium-term

(3.1.1.13) Likelihood of the risk having an effect within the anticipated time horizon

Select from:

☑ Very unlikely

(3.1.1.14) Magnitude

Select from:

☑ High

(3.1.1.16) Anticipated effect of the risk on the financial position, financial performance and cash flows of the organization in the selected future time horizons

As an oil spill can occur due to sudden emergencies, the most acceptable response method is environmental insurance against possible environmental pollution.

(3.1.1.17) Are you able to quantify the financial effect of the risk?

Select from:

☑ No

(3.1.1.26) Primary response to risk

Policies and plans

☑ Increase insurance coverage

(3.1.1.27) Cost of response to risk

0

(3.1.1.28) Explanation of cost calculation

Possible financial costs in the event of risk realization have not yet been calculated; they will be calculated in the future.

(3.1.1.29) Description of response

Since the event has not occurred, the possible financial consequences have not been calculated and will depend on the volume of the spill. At the same time we note KMG pays considerable attention to the measures the company uses to ensure the integrity of pipelines as an important aspect of industrial and environmental safety.

Climate change

(3.1.1.1) Risk identifier

Select from:

☑ Risk2

(3.1.1.3) Risk types and primary environmental risk driver

Policy

☑ Changes to national legislation

(3.1.1.4) Value chain stage where the risk occurs

Select from:

☑ Direct operations

(3.1.1.6) Country/area where the risk occurs

Select all that apply

☑ Kazakhstan

(3.1.1.9) Organization-specific description of risk

In accordance with Article 289 of the Environmental Code of Kazakhstan, GHG from hydrocarbon production are subject to carbon regulation. 14 subsidiaries of KMG fall under the Kazakhstan Emissions Trading Scheme and 2 subsidiaries are covered under the European Emissions Trading Scheme, so the risks of current regulation are included in the Map of key risks of KMG, assessed and identified as political and regulatory factors: - volumes of issued quotas; -withdrawal of issued quotas due to reduction of production capacity carbon pricing/ pricing mechanisms to reduce greenhouse gas emissions; - allocation of quotas on the basis of benchmarking; - reducing energy consumption to reduce emissions; - consideration of Energy Efficiency parameters in decision making. Risks are monitored on a quarterly basis. Subsidiaries monitor greenhouse gas emissions. Subsidiaries are required to submit annual verified greenhouse gas emissions inventory reports to the authorized environmental authority and apply for additional allowances in a timely manner, if necessary. Current regulatory risks are minimized through internal regulations, such as: - Strategy 2022-2031; - Low Carbon Development Program 2022-2031; - Environmental Policy; - Emissions Management Policy. Market Relevant, always included. The ministry of Environment is going to implement regulation of methane emissions

(3.1.1.11) Primary financial effect of the risk

Select from:

☑ Increased direct costs

(3.1.1.12) Time horizon over which the risk is anticipated to have a substantive effect on the organization

Select all that apply

☑ Short-term

(3.1.1.13) Likelihood of the risk having an effect within the anticipated time horizon

Select from:

☑ Virtually certain

(3.1.1.14) Magnitude

Select from:

☑ Medium-high

(3.1.1.16) Anticipated effect of the risk on the financial position, financial performance and cash flows of the organization in the selected future time horizons

As governments around the world implement stricter regulations to address climate change, oil and gas companies could face increased compliance costs, carbon pricing mechanisms, and requirements to reduce greenhouse gas (GHG) emissions. This could impact the profitability of these companies and their ability to operate in certain jurisdictions; KMGs actively participates in working groups with the Ministry of Ecology and Natural Resources to improve carbon regulation, KazETS, and is developing an internal carbon price mechanism for assessing investment projects.

(3.1.1.17) Are you able to quantify the financial effect of the risk?

Select from:

☑ No

(3.1.1.26) Primary response to risk

Policies and plans

☑ Develop a climate transition plan

(3.1.1.27) Cost of response to risk

0

(3.1.1.28) Explanation of cost calculation

Possible financial costs in the event of risk realization have not yet been calculated; they will be calculated in the future.

(3.1.1.29) Description of response

To avoid further risks of fines and the need to buy quotas, which will become more expensive as carbon regulation tightens, KMG has developed and approved a Low- Carbon Development Program for the period 2022-2031, which implementation will reduce to 1.6 million tons of CO2 by 2031.

Climate change

(3.1.1.1) Risk identifier

Select from:

☑ Risk3

(3.1.1.3) Risk types and primary environmental risk driver

Policy

☑ Changes to international law and bilateral agreements

(3.1.1.4) Value chain stage where the risk occurs

Select from:

☑ Direct operations

(3.1.1.6) Country/area where the risk occurs

Select all that apply

☑ Kazakhstan

(3.1.1.9) Organization-specific description of risk

Currently, only carbon dioxide falls under the regulation of greenhouse gases. At the moment, the issue of including methane in the regulation of greenhouse gas emissions is being discussed. In Kazakhstan, when regulating methane, the most vulnerable sector is the oil and gas sector. In particular, KMG has a sufficient number of fugitive sources which are not currently metered. Methane emissions regulation, in turn, will require tracking all methane leaks and taking measures to eliminate them, which will require additional financial costs and re-equipment of the Company's technological Park.

(3.1.1.11) Primary financial effect of the risk

Select from:

☑ Increased direct costs

(3.1.1.12) Time horizon over which the risk is anticipated to have a substantive effect on the organization

Select all that apply

☑ Medium-term

(3.1.1.13) Likelihood of the risk having an effect within the anticipated time horizon

Select from:

☑ About as likely as not

(3.1.1.14) Magnitude

Select from:

☑ Medium

(3.1.1.16) Anticipated effect of the risk on the financial position, financial performance and cash flows of the organization in the selected future time horizons

The anticipated effects depend on the nature of the changes: 1. Regulatory Compliance Costs - Increased Compliance Requirements: Stricter environmental regulations may lead to increased operational costs for compliance, such as investing in cleaner technologies or processes. - Legal Risks: Companies might face higher legal costs if new laws introduce uncertainty or require them to change their operations to avoid penalties or lawsuits. 2. Access to Resources: - Exploration and Extraction Rights: Changes in laws could impact access to oil and gas reserves. If a country tightens regulations on foreign investments or resource extraction, companies could see reduced access to lucrative drilling sites. - Trade Barriers: New trade laws or tariffs could affect the ability to import equipment or export oil and gas, impacting profitability. 3. Market Dynamics: - Price Volatility: Changes in regulations can shift market dynamics, potentially leading to increased price volatility in oil and gas markets. Companies with fixed long-term contracts may be at risk if market prices fall. - Supply and Demand Shifts: Regulations that promote renewable energy sources may decrease demand for oil and gas over time, which could lead to lower revenues for traditional fossil fuel companies. 4. nvestment Climate: - Attractiveness to Investors: Changes in international laws can influence investor sentiment. Favorable laws (e.g., tax incentives for clean energy initiatives) might attract investment, while unfavorable regulations could deter it. - Cost of Capital: If new regulations increase risk perceptions or operational costs, the cost of capital may rise for oil and gas companies. 5. Reputational Risks: Changes in environmental laws may shift public perception and increase pressure on companies to adhere to environmental, social and governance (ESG) standards, impacting share prices and stakeholder relationships.

(3.1.1.17) Are you able to quantify the financial effect of the risk?

Select from:

☑ No

(3.1.1.26) Primary response to risk

Policies and plans

☑ Develop a climate transition plan

(3.1.1.27) Cost of response to risk

0

(3.1.1.28) Explanation of cost calculation

Possible financial costs in the event of risk realization have not yet been calculated; they will be calculated in the future.

(3.1.1.29) Description of response

To reduce this risk and determine reliable methane leaks, KMG, as part of its Low Carbon Development Program, has set a goal to implement an LDAR system at its upstream assets.

Climate change

(3.1.1.1) Risk identifier

Select from:

☑ Risk4

(3.1.1.3) Risk types and primary environmental risk driver

Technology

☑ Other technology risk, please specify :electricity tariff increase

(3.1.1.4) Value chain stage where the risk occurs

Select from:

☑ Direct operations

(3.1.1.6) Country/area where the risk occurs

Select all that apply

☑ Kazakhstan

(3.1.1.9) Organization-specific description of risk

Electricity prices in Kazakhstan are among the lowest in the world. Implementation of the best available techniques (BAT) provided for by the new Environmental to the Code of the Republic of Kazakhstan, it will require additional costs for energy-producing organizations, in particular, for large fuel-burning plants. In accordance with the principles. According to the EU BAT, dust cleaning technologies should be provided for such installations, as well as the removal of sulfur oxides (SOx) and nitrogen oxides (NOx) in the flue tracts. The introduction of appropriate measures will entail an additional increase ын the cost of purchased electricity

(3.1.1.11) Primary financial effect of the risk

Select from:

☑ Increased direct costs

(3.1.1.12) Time horizon over which the risk is anticipated to have a substantive effect on the organization

Select all that apply

☑ Short-term

(3.1.1.13) Likelihood of the risk having an effect within the anticipated time horizon

Select from:

☑ Very likely

(3.1.1.14) Magnitude

Select from:

☑ High

(3.1.1.16) Anticipated effect of the risk on the financial position, financial performance and cash flows of the organization in the selected future time horizons

The adoption of new technologies, such as electric vehicles and renewable energy sources, could disrupt traditional business models of oil and gas companies. These companies might need to adapt by investing in new technologies, which could entail significant costs and uncertainties; KMG is actively developing projects in the field of EV charging infrastructure in Kazakhstan and Romania, low-carbon fuel options (SAF, biodiesel, green hydrogen), and renewable energy sources.

(3.1.1.17) Are you able to quantify the financial effect of the risk?

Select from:

☑ No

(3.1.1.26) Primary response to risk

Diversification

☑ Other diversification, please specify :develop a climate transition plan, increase the renewable energy amount

(3.1.1.27) Cost of response to risk

0

(3.1.1.28) Explanation of cost calculation

Possible financial costs in the event of risk realization have not yet been calculated; they will be calculated in the future.

(3.1.1.29) Description of response

Considering the fact that in comparison with GDP per capita, the price of electricity in Kazakhstan is the lowest in the region, the prospect of price growth in the future is realistic.

Water

(3.1.1.1) Risk identifier

Select from:

☑ Risk2

(3.1.1.3) Risk types and primary environmental risk driver

Chronic physical

☑ Water stress

(3.1.1.4) Value chain stage where the risk occurs

Select from:

☑ Direct operations

(3.1.1.6) Country/area where the risk occurs

Select all that apply

☑ Kazakhstan

(3.1.1.7) River basin where the risk occurs

Select all that apply

☑ Ural

☑ Other, please specify :Caspian sea

(3.1.1.9) Organization-specific description of risk

«Water stress» negatively affects the ability to increase capacity of the performance capacity

(3.1.1.11) Primary financial effect of the risk

Select from:

☑ Increased capital expenditures

(3.1.1.12) Time horizon over which the risk is anticipated to have a substantive effect on the organization

Select all that apply

☑ Long-term

(3.1.1.13) Likelihood of the risk having an effect within the anticipated time horizon

Select from:

☑ Unlikely

(3.1.1.14) Magnitude

Select from:

☑ High

(3.1.1.16) Anticipated effect of the risk on the financial position, financial performance and cash flows of the organization in the selected future time horizons

KMG analyzes and records the Company's production facilities located in regions with increased water deficit according to the WRI Aqueduct water stress indicator, related to the Caspian Sea, Syr Darya and Ural river basins. In regions with high water deficit, KMG develops water management measures to use less fresh water, increase recycled water and carefully monitor water use. At the same time, we note that the need for water resources in production activities is a necessary condition for technological processes.

(3.1.1.17) Are you able to quantify the financial effect of the risk?

Select from:

☑ No

(3.1.1.26) Primary response to risk

Infrastructure, technology and spending

☑ Improve maintenance of infrastructure

(3.1.1.27) Cost of response to risk

0

(3.1.1.28) Explanation of cost calculation

Possible financial costs in the event of risk realization have not yet been calculated; they will be calculated in the future.

(3.1.1.29) Description of response

Possible financial costs in the event of risk realization have not yet been calculated; they will be calculated in the future.

Climate change

(3.1.1.1) Risk identifier

Select from:

☑ Risk5

(3.1.1.3) Risk types and primary environmental risk driver

Acute physical

☑ Drought

(3.1.1.4) Value chain stage where the risk occurs

Select from:

☑ Direct operations

(3.1.1.6) Country/area where the risk occurs

Select all that apply

☑ Kazakhstan

(3.1.1.9) Organization-specific description of risk

1. Deterioration in workers' health, increasing the likelihood of injuries and deaths. 2. Decrease in labour productivity 3. Increased labour costs due to reduced staff working hours due to high/low temperatures. 4. Increased operating costs If water supplies become limited in affected regions, water shortages could significantly impact operations. The most vulnerable assets in this regard are the PS Stepnoe of KazTransOil JSC and the Alibekmola oil field of Kazakhoilaktobe LLP.

(3.1.1.11) Primary financial effect of the risk

Select from:

☑ Increased capital expenditures

(3.1.1.12) Time horizon over which the risk is anticipated to have a substantive effect on the organization

Select all that apply

☑ Long-term

(3.1.1.13) Likelihood of the risk having an effect within the anticipated time horizon

Select from:

☑ Very likely

(3.1.1.14) Magnitude

Select from:

☑ Medium-high

(3.1.1.16) Anticipated effect of the risk on the financial position, financial performance and cash flows of the organization in the selected future time horizons

To mitigate the effects of prolonged periods of high or low temperatures, a company can take the following measures: 1. Provide adequate heating and air conditioning to maintain a comfortable temperature for employees and equipment. 2. Regularly maintain equipment to avoid overheating or freezing in extreme conditions. 3. Ensure sufficient insulation of buildings and premises to prevent freezing water pipes, heating systems, and electrical equipment. 4. Establish regular and systematic checks for adequate weather protection to avoid property damage and business loss. 5. Provide timely information to employees and clients about upcoming weather changes and recommendations on behaviour in such conditions. In addition to these measures, the risk management team will develop specific action plans and procedures to quickly respond to extreme temperature emergencies and minimize business impacts.

(3.1.1.17) Are you able to quantify the financial effect of the risk?

Select from:

☑ No

(3.1.1.26) Primary response to risk

Infrastructure, technology and spending

☑ Improve maintenance of infrastructure

(3.1.1.27) Cost of response to risk

0

(3.1.1.28) Explanation of cost calculation

Possible financial costs in the event of risk realization have not yet been calculated; they will be calculated in the future.

(3.1.1.29) Description of response

As part of the climate change adaptation strategy, KMG will implement the following measures: • Strengthening infrastructure: Modernizing production capacities and infrastructure facilities to increase their resilience to climate risks. This includes building protective structures against floods, improving cooling and ventilation systems at facilities exposed to temperature increases, and reinforcing engineering structures in areas with a high risk of earthquakes. Investing in sustainable technologies: Transitioning to new, more climate-resilient technologies, including energy-efficient and environmentally friendly production processes. Implementing "green" technologies and the best available techniques (BAT) will be a priority to enhance the company's environmental and economic sustainability. Creating emergency response systems: Developing and implementing response plans for extreme weather events, such as storms or abnormal temperatures, to minimize downtime and losses associated with force majeure climatic circumstances.

Climate change

(3.1.1.1) Risk identifier

Select from:

☑ Risk6

(3.1.1.3) Risk types and primary environmental risk driver

Acute physical

☑ Cold wave/frost

(3.1.1.4) Value chain stage where the risk occurs

Select from:

☑ Direct operations

(3.1.1.6) Country/area where the risk occurs

Select all that apply

☑ Kazakhstan

(3.1.1.9) Organization-specific description of risk

1. Deterioration in workers' health, increasing the likelihood of injuries and deaths. 2. Decrease in labour productivity 3. Increased labour costs due to reduced staff working hours due to high/low temperatures. 4. Increased operating costs Rising average temperatures can decrease worker productivity and increase energy demand for cooling buildings and structures. The most vulnerable assets include the Pavlodar Petrochemical Plant LLP, the Kazakhturkmunai LLP oil field, and PS Atasu KazTransOil JSC.

(3.1.1.11) Primary financial effect of the risk

Select from:

☑ Increased capital expenditures

(3.1.1.12) Time horizon over which the risk is anticipated to have a substantive effect on the organization

Select all that apply

☑ Long-term

(3.1.1.13) Likelihood of the risk having an effect within the anticipated time horizon

Select from:

☑ Very likely

(3.1.1.14) Magnitude

Select from:

☑ Medium-high

(3.1.1.16) Anticipated effect of the risk on the financial position, financial performance and cash flows of the organization in the selected future time horizons

To mitigate the effects of prolonged periods of high or low temperatures, a company can take the following measures: 1. Provide adequate heating and air conditioning to maintain a comfortable temperature for employees and equipment. 2. Regularly maintain equipment to avoid overheating or freezing in extreme conditions. 3. Ensure sufficient insulation of buildings and premises to prevent freezing water pipes, heating systems, and electrical equipment. 4. Establish regular and systematic checks for adequate weather protection to avoid property damage and business loss. 5. Provide timely information to employees and clients about upcoming weather changes and recommendations on behaviour in such conditions. In addition to these measures, the risk management team will develop specific action plans and procedures to quickly respond to extreme temperature emergencies and minimize business impacts.

(3.1.1.17) Are you able to quantify the financial effect of the risk?

Select from:

☑ No

(3.1.1.26) Primary response to risk

Infrastructure, technology and spending

☑ Improve maintenance of infrastructure

(3.1.1.27) Cost of response to risk

0

(3.1.1.28) Explanation of cost calculation

Possible financial costs in the event of risk realization have not yet been calculated; they will be calculated in the future.

(3.1.1.29) Description of response

As part of the climate change adaptation strategy, KMG will implement the following measures: • Strengthening infrastructure: Modernizing production capacities and infrastructure facilities to increase their resilience to climate risks. This includes building protective structures against floods, improving cooling and ventilation systems at facilities exposed to temperature increases, and reinforcing engineering structures in areas with a high risk of earthquakes. Investing in sustainable technologies: Transitioning to new, more climate-resilient technologies, including energy-efficient and environmentally friendly production processes. Implementing "green" technologies and the best available techniques (BAT) will be a priority to enhance the company's environmental and economic sustainability. Creating emergency response systems: Developing and implementing response plans for extreme weather events, such as storms or abnormal temperatures, to minimize downtime and losses associated with force majeure climatic circumstances.

Climate change

(3.1.1.1) Risk identifier

Select from:

☑ Risk7

(3.1.1.3) Risk types and primary environmental risk driver

Acute physical

☑ Flooding (coastal, fluvial, pluvial, groundwater)

(3.1.1.4) Value chain stage where the risk occurs

Select from:

☑ Direct operations

(3.1.1.6) Country/area where the risk occurs

Select all that apply

☑ Kazakhstan

(3.1.1.9) Organization-specific description of risk

1. Accelerated wear/damage to production facilities/technological equipment. 2. Stop production 3. Increased likelihood of injury and death

(3.1.1.11) Primary financial effect of the risk

Select from:

☑ Increased capital expenditures

(3.1.1.12) Time horizon over which the risk is anticipated to have a substantive effect on the organization

Select all that apply

☑ Long-term

(3.1.1.13) Likelihood of the risk having an effect within the anticipated time horizon

Select from:

☑ Very likely

(3.1.1.14) Magnitude

Select from:

☑ Medium-low

(3.1.1.16) Anticipated effect of the risk on the financial position, financial performance and cash flows of the organization in the selected future time horizons

To mitigate the effects of prolonged periods of high or low temperatures, a company can take the following measures: 1. Provide adequate heating and air conditioning to maintain a comfortable temperature for employees and equipment. 2. Regularly maintain equipment to avoid overheating or freezing in extreme conditions. 3. Ensure sufficient insulation of buildings and premises to prevent freezing water pipes, heating systems, and electrical equipment. 4. Establish regular and systematic checks for adequate weather protection to avoid property damage and business loss. 5. Provide timely information to employees and clients about upcoming weather changes and recommendations on behaviour in such conditions. In addition to these measures, the risk management team will develop specific action plans and procedures to quickly respond to extreme temperature emergencies and minimize business impacts.

(3.1.1.17) Are you able to quantify the financial effect of the risk?

Select from:

☑ No

(3.1.1.26) Primary response to risk

Infrastructure, technology and spending

☑ Improve maintenance of infrastructure

(3.1.1.27) Cost of response to risk

0

(3.1.1.28) Explanation of cost calculation

Possible financial costs in the event of risk realization have not yet been calculated; they will be calculated in the future.

(3.1.1.29) Description of response

As part of the climate change adaptation strategy, KMG will implement the following measures: • Strengthening infrastructure: Modernizing production capacities and infrastructure facilities to increase their resilience to climate risks. This includes building protective structures against floods, improving cooling and ventilation systems at facilities exposed to temperature increases, and reinforcing engineering structures in areas with a high risk of earthquakes. Investing in sustainable

technologies: Transitioning to new, more climate-resilient technologies, including energy-efficient and environmentally friendly production processes. Implementing "green" technologies and the best available techniques (BAT) will be a priority to enhance the company's environmental and economic sustainability. Creating emergency response systems: Developing and implementing response plans for extreme weather events, such as storms or abnormal temperatures, to minimize downtime and losses associated with force majeure climatic circumstances.

Climate change

(3.1.1.1) Risk identifier

Select from:

☑ Risk8

(3.1.1.3) Risk types and primary environmental risk driver

Acute physical

☑ Heat wave

(3.1.1.4) Value chain stage where the risk occurs

Select from:

☑ Direct operations

(3.1.1.6) Country/area where the risk occurs

Select all that apply

☑ Kazakhstan

(3.1.1.9) Organization-specific description of risk

1. Deterioration in workers' health, increasing the likelihood of injuries and deaths. 2. Decrease in labour productivity 3. Increased labour costs due to reduced staff working hours due to high/low temperatures. 4. Increased operating costs

(3.1.1.11) Primary financial effect of the risk

Select from:

☑ Increased capital expenditures

(3.1.1.12) Time horizon over which the risk is anticipated to have a substantive effect on the organization

Select all that apply

☑ Long-term

(3.1.1.13) Likelihood of the risk having an effect within the anticipated time horizon

Select from:

☑ Very likely

(3.1.1.14) Magnitude

Select from:

☑ Medium-high

(3.1.1.16) Anticipated effect of the risk on the financial position, financial performance and cash flows of the organization in the selected future time horizons

To mitigate the effects of prolonged periods of high or low temperatures, a company can take the following measures: 1. Provide adequate heating and air conditioning to maintain a comfortable temperature for employees and equipment. 2. Regularly maintain equipment to avoid overheating or freezing in extreme conditions. 3. Ensure sufficient insulation of buildings and premises to prevent freezing water pipes, heating systems, and electrical equipment. 4. Establish regular and systematic checks for adequate weather protection to avoid property damage and business loss. 5. Provide timely information to employees and clients about upcoming weather changes and recommendations on behaviour in such conditions. In addition to these measures, the risk management team will develop specific action plans and procedures to quickly respond to extreme temperature emergencies and minimize business impacts.

(3.1.1.17) Are you able to quantify the financial effect of the risk?

Select from:

☑ No

(3.1.1.26) Primary response to risk

Infrastructure, technology and spending

☑ Improve maintenance of infrastructure

(3.1.1.27) Cost of response to risk

0

(3.1.1.28) Explanation of cost calculation

Possible financial costs in the event of risk realization have not yet been calculated; they will be calculated in the future.

(3.1.1.29) Description of response

As part of the climate change adaptation strategy, KMG will implement the following measures: • Strengthening infrastructure: Modernizing production capacities and infrastructure facilities to increase their resilience to climate risks. This includes building protective structures against floods, improving cooling and ventilation systems at facilities exposed to temperature increases, and reinforcing engineering structures in areas with a high risk of earthquakes. Investing in sustainable technologies: Transitioning to new, more climate-resilient technologies, including energy-efficient and environmentally friendly production processes. Implementing "green" technologies and the best available techniques (BAT) will be a priority to enhance the company's environmental and economic sustainability. Creating emergency response systems: Developing and implementing response plans for extreme weather events, such as storms or abnormal temperatures, to minimize downtime and losses associated with force majeure climatic circumstances.
[Add row]

(3.1.2) Provide the amount and proportion of your financial metrics from the reporting year that are vulnerable to the substantive effects of environmental risks.

Climate change

(3.1.2.1) Financial metric

Select from:

☑ Other, please specify :EBITDA

(3.1.2.2) Amount of financial metric vulnerable to transition risks for this environmental issue (unit currency as selected in 1.2)

232700000

(3.1.2.3) % of total financial metric vulnerable to transition risks for this environmental issue

Select from:

☑ 1-10%

(3.1.2.4) Amount of financial metric vulnerable to physical risks for this environmental issue (unit currency as selected in 1.2)

95500000

(3.1.2.5) % of total financial metric vulnerable to physical risks for this environmental issue

Select from:

☑ 1-10%

(3.1.2.7) Explanation of financial figures

In 2024 KMG made an analyses of key transition and physical risks for the KMG's assets financial impact in different scenarios; NDC, • Below 2ºC, • Delayed transition (assumes global annual emissions do not decrease until 2030), • Net Zero 2050 (an ambitious scenario that limits global warming to 1.5 C through stringent climate policies and innovation). Based on the results of the analysis of key transition and physical risks for the KMG's assets financial impact has different magnitudes in different scenarios. However, it is observed that transition risks may have a more significant impact on the KMG's financial performance. Transition risks may prevail over the financial impact of physical ones. At the same time tightening carbon policies will impose an additional financial burden in terms of transition risks, but reduce the burden of physical risks. Analysis shows that transition risks may have more significant financial impact on KMG' assets across all of the scenarios. Transition risks the most significantly impacting financial performance are carbon pricing and change in oil demand. Generally, more vulnerable to those transition risks assets are exploration and refinery. Significance of the impact varies by jurisdiction. For instance, for assets located in Kazakhstan carbon pricing is less intense due to market and regulation structures then for those located in Romania. On the other had analysis shows that physical risks are more material in Kazakhstan, mainly due to historically more dry and hot climate conditions which are according to analysis will be more sever in the future across all of the scenarios, resulting in financial impact of climate indicators related to the high temperature. Depending on a scenario the potential combined impact of climate-related risks and opportunities may result into 0% to 2.4% in short-term, 0% to 5.1% in medium-term and 0% to 10.1% in long-term horizons of group EBIDTA margin. The financial indicataros show in table covers scenario NDC.

Water

(3.1.2.1) Financial metric

Select from:

☑ Other, please specify :Legislation change

(3.1.2.2) Amount of financial metric vulnerable to transition risks for this environmental issue (unit currency as selected in 1.2)

0

(3.1.2.3) % of total financial metric vulnerable to transition risks for this environmental issue

Select from:

☑ Less than 1%

(3.1.2.4) Amount of financial metric vulnerable to physical risks for this environmental issue (unit currency as selected in 1.2)

0

(3.1.2.5) % of total financial metric vulnerable to physical risks for this environmental issue

Select from:

☑ Less than 1%

(3.1.2.7) Explanation of financial figures

Risks that will have a significant impact in 2024 or may have a significant impact on future operations have not yet been identified. In April 2025, a new Water Code of the Republic of Kazakhstan was adopted, according to which operators of facilities receiving permission for special water use must develop plans to increase water reuse (where necessary). The norm comes into force in 2027. The company is also working on a draft Water Resources Management Program and will bring it into compliance with the new Water Code in 2025. Additional financial costs will be calculated based on the results of the proposed activities.
[Add row]

(3.2) Within each river basin, how many facilities are exposed to substantive effects of water-related risks, and what percentage of your total number of facilities does this represent?

Row 1

(3.2.1) Country/Area & River basin

Kazakhstan

☑ Ural

(3.2.2) Value chain stages where facilities at risk have been identified in this river basin

Select all that apply

☑ Direct operations

(3.2.3) Number of facilities within direct operations exposed to water-related risk in this river basin

1

(3.2.4) % of your organization’s total facilities within direct operations exposed to water-related risk in this river basin

Select from:

☑ Less than 1%

(3.2.9) % organization’s global oil and gas production volume that could be affected by these facilities

Select from:

☑ Less than 1%

(3.2.10) % organization’s total global revenue that could be affected

Select from:

☑ Less than 1%

(3.2.11) Please explain

Most of the facilities of KMG's subsidiaries and affiliates are located in the western region of Kazakhstan, where the problem of "water deficit" persists, and there is also a dependence of water sources on adjacent and neighboring countries, which increases the risk of "water stress" for production needs and can significantly affect the company financially or strategically. The Company's activities have the most significant impact on water bodies in the western region of Kazakhstan (the Ural River), which are of special ecological, economic, historical, cultural and recreational value. In order to prevent negative impacts on sensitive ecosystems, regular environmental monitoring is carried out. Atyrau Oil Refinery takes water from the Ural River The "water deficit" of the Ural River is high due to the following factors: - uneven distribution of fresh water; - high variability of runoff; - the water of the Ural River in Kazakhstan is characterized as "moderately" polluted. There is a high demand for clean and fresh water for the needs of the population, industry, fisheries, agriculture. One of KMG's initiatives is to address issues of fresh water conservation, where the Company is implementing projects to reduce discharges and reduce fresh water intake from natural sources. One of the significant projects is the TAZALYQ project at the Atyrau Oil Refinery, aimed at modernizing treatment facilities, building modern treatment facilities and reducing water intake from the Ural River.

Row 2

(3.2.1) Country/Area & River basin

Zimbabwe

☑ Other, please specify :Caspian Sea

(3.2.2) Value chain stages where facilities at risk have been identified in this river basin

Select all that apply

☑ Direct operations

(3.2.3) Number of facilities within direct operations exposed to water-related risk in this river basin

2

(3.2.4) % of your organization’s total facilities within direct operations exposed to water-related risk in this river basin

Select from:

☑ 26-50%

(3.2.9) % organization’s global oil and gas production volume that could be affected by these facilities

Select from:

☑ 26-50%

(3.2.10) % organization’s total global revenue that could be affected

Select from:

☑ 21-30%

(3.2.11) Please explain

he risk of oil spills during offshore operations in the corporate system of identification and risk assessment is defined as low probability, but disastrous when implemented. KMG's readiness for oil spills is based on the application of internal procedures and policies developed in accordance with the legislation of the Republic of Kazakhstan and sound international practice for the exploitation of oil and gas fields. KMG possesses an extensive reserve of oil spill response equipment, modern technologies and a specialized division. All equipment and specially trained personnel are in a state of constant readiness. To regularly practice planning, tactics and use of equipment in oil spill response, KMG annually develops a comprehensive training and incident command team exercises plan, approved by the Emergency Department of the Emergency Committee of the Ministry of Internal Affairs of the Republic of Kazakhstan. The plan includes conducting regular training and oil spill response exercises, as well as Republican exercises jointly with the Ministry of Emergency of the Republic of Kazakhstan, in order to test readiness at the regional level and increase the efficiency of resource mobilization. In the unlikely event of an oil spill, international resources will be mobilized, while OSR activities will be coordinated by the Republican authority in accordance with the National Prevention and OSR Plan.
[Add row]

(3.3) In the reporting year, was your organization subject to any fines, enforcement orders, and/or other penalties for water-related regulatory violations?

(3.3.1) Water-related regulatory violations

Select from:

☑ Yes

(3.3.2) Fines, enforcement orders, and/or other penalties

Select all that apply

☑ Fines, but none that are considered as significant

(3.3.3) Comment

Two enterprises from the KMG group of companies received and paid fines for the discharge of wastewater with a slight excess of some ingredients for a total of 7.5 thousand US dollars.
[Fixed row]

(3.3.1) Provide the total number and financial value of all water-related fines.

(3.3.1.1) Total number of fines

3

(3.3.1.2) Total value of fines

7585.43

(3.3.1.3) % of total facilities/operations associated

8

(3.3.1.4) Number of fines compared to previous reporting year

Select from:
☑ Higher

(3.3.1.5) Comment

In 2024 there were 3 small fines were imposed in the area of water resources management.
[Fixed row]

(3.5) Are any of your operations or activities regulated by a carbon pricing system (i.e. ETS, Cap & Trade or Carbon Tax)?

Select from:

☑ Yes

(3.5.1) Select the carbon pricing regulation(s) which impact your operations.

Select all that apply

☑ EU ETS

☑ Kazakhstan ETS

(3.5.2) Provide details of each Emissions Trading Scheme (ETS) your organization is regulated by.

EU ETS

(3.5.2.1) % of Scope 1 emissions covered by the ETS

100

(3.5.2.2) % of Scope 2 emissions covered by the ETS

0

(3.5.2.3) Period start date

12/31/2023

(3.5.2.4) Period end date

12/30/2024

(3.5.2.5) Allowances allocated

776296

(3.5.2.6) Allowances purchased

0

(3.5.2.7) Verified Scope 1 emissions in metric tons CO2e

688728

(3.5.2.8) Verified Scope 2 emissions in metric tons CO2e

0

(3.5.2.9) Details of ownership

Select from:

☑ Facilities we own and operate

(3.5.2.10) Comment

Information is provided on oil refineries located in Romania, which received 776,296 free carbon allowances for CO2 emissions from the EU ETS, but emitted 688,728 tons of CO2. Therefore, the additional purchase of quotas was not required.

Kazakhstan ETS

(3.5.2.1) % of Scope 1 emissions covered by the ETS

100

(3.5.2.2) % of Scope 2 emissions covered by the ETS

0

(3.5.2.3) Period start date

12/31/2023

(3.5.2.4) Period end date

12/30/2024

(3.5.2.5) Allowances allocated

7715261

(3.5.2.6) Allowances purchased

486930

(3.5.2.7) Verified Scope 1 emissions in metric tons CO2e

6940407

(3.5.2.8) Verified Scope 2 emissions in metric tons CO2e

0

(3.5.2.9) Details of ownership

Select from:

☑ Facilities we own and operate

(3.5.2.10) Comment

Quotas for plant operators (i.e. subsidiaries) are allocated to each plant individually for a period of 1 year for the duration of the National Plan. 14 subsidiaries of KMG are included in the quota system (2 of them are new). The volume of free quotas for 14 subsidiaries in accordance with the National Quota Allocation Plan for 2024 totaled 7,715,261 tons of CO2. At the same time, the Ministry of Ecology withdrew a total of 407,000 quotas from them due to non-fulfillment of production capacities. At the same time, 2 subsidiaries expect to receive additional free quotas from the state in the amount of 257422 by the end of 2025, due to an increase in production capacity and the launch of new stationary sources. Also, for a total of 14 companies, there are residual quotas in the amount of 429,373 tons of CO2 since last year. In 2024, 3 subsidiaries experienced a quota shortage, so they purchased 486,930 CO2 emission quotas, of which 71586 quotas were offset units, which are indefinite. It should be noted that the information is presented here for a total of 14 companies, but each subsidiary reports its emissions and quotas (surplus and deficit) to the Ministry of Ecology independently.
[Fixed row]

(3.5.4) What is your strategy for complying with the systems you are regulated by or anticipate being regulated by?

Climate Regulation and Strategy KMG closely monitors developments in national and international carbon regulation, paying particular attention to the ongoing tightening of requirements and emerging global trends. In order to mitigate the risks associated with carbon regulation and to position the company for long-term resilience, KMG has adopted a comprehensive climate strategy structured around several key directions: Reducing GHG emissions by improving energy efficiency across operations, expanding the use of renewable energy sources (RES), and developing an offset policy; Strengthening GHG management through the introduction of a corporate greenhouse gas monitoring and inventory system, supported by the development of a unified corporate GHG cadastre; Engaging with stakeholders via consultations with government authorities and industry associations to anticipate regulatory changes and prepare adaptive measures; Exploring opportunities for low-carbon diversification, including the development of new products and services that enhance competitiveness in a low-carbon economy. Monitoring, Forecasting, and Methane Regulation The introduction of the corporate GHG monitoring and inventory system will enable automation of calculations, improved forecasting, and more reliable decision-making, ensuring that emissions remain within allocated allowances. Recognizing the likelihood of future regulation of methane emissions in Kazakhstan, KMG is proactively preparing to meet this challenge through the planned implementation of a Leak Detection and Repair (LDAR) system. To ensure resilience under tightening regulatory frameworks, KMG is also developing scenario-based approaches to long-term planning, enabling the company to anticipate and adapt to different trajectories of state climate policy. Innovation and Low-Carbon Solutions In alignment with the Republic of Kazakhstan's target of achieving carbon neutrality by 2060 and growing global demand for products with a low carbon footprint, KMG is actively pursuing research and development initiatives, including: Assessing the potential for Carbon Capture, Utilization, and Storage (CCUS) in Kazakhstan; Establishing a Center of Competence for Hydrogen Energy to advance research and pilot projects in blue and green hydrogen; Exploring the feasibility of biofuel production for the transport sector, supporting both domestic demand and international market opportunities. Internal Carbon Policy and Pricing Mechanisms Beyond the implementation of the Low-Carbon Development Program's Action Plan, KMG is enhancing its internal carbon management tools. A central element of this effort is the use of internal carbon pricing mechanisms: Since 2022, carbon footprint modeling and associated financial assessments, including costs and revenues related to participation in the Kazakhstan ETS and offset projects, have become a mandatory component of feasibility studies for all new capital projects. A shadow carbon price is applied in project evaluations, aligned with current and projected ETS quota prices. This methodology enables the company to: Build a portfolio of assets consistent with long-term decarbonization objectives, Evaluate financial exposure to external carbon regulation, Assess the sustainability and cost-efficiency of investments under various climate policy scenarios. In addition, in 2022 KMG approved an Internal Carbon Pricing Program that outlines conceptual approaches to introducing internal carbon payments and establishing a corporate Carbon Fund. This fund is designed to provide financial incentives for subsidiaries and affiliates to reduce GHG emissions, while also serving as an additional source of financing for low-carbon projects.

(3.6) Have you identified any environmental opportunities which have had a substantive effect on your organization in the reporting year, or are anticipated to have a substantive effect on your organization in the future?

	Environmental opportunities identified
Climate change	*Select from:* ☑ Yes, we have identified opportunities, and some/all are being realized

	Environmental opportunities identified
Water	*Select from:* ☑ Yes, we have identified opportunities, and some/all are being realized

[Fixed row]

(3.6.1) Provide details of the environmental opportunities identified which have had a substantive effect on your organization in the reporting year, or are anticipated to have a substantive effect on your organization in the future.

Climate change

(3.6.1.1) Opportunity identifier

Select from:

☑ Opp1

(3.6.1.3) Opportunity type and primary environmental opportunity driver

Resource efficiency

☑ Increased efficiency of production and/or distribution processes

(3.6.1.4) Value chain stage where the opportunity occurs

Select from:

☑ Direct operations

(3.6.1.5) Country/area where the opportunity occurs

Select all that apply

☑ Kazakhstan

(3.6.1.8) Organization specific description

KMG has its own heat and electricity generation assets and buys these types of resources from third parties. Improvement of energy efficiency will allow the Company to reduce energy dependence on third parties and save financial resources. By improving operational efficiency, KMG plans to reduce its own consumption of fuel resources (gas, fuel oil), which can be sold to third parties.

(3.6.1.9) Primary financial effect of the opportunity

Select from:

☑ Reduced indirect (operating) costs

(3.6.1.10) Time horizon over which the opportunity is anticipated to have a substantive effect on the organization

Select all that apply

☑ Long-term

(3.6.1.11) Likelihood of the opportunity having an effect within the anticipated time horizon

Select from:

☑ Very likely (90–100%)

(3.6.1.12) Magnitude

Select from:

☑ High

(3.6.1.14) Anticipated effect of the opportunity on the financial position, financial performance and cash flows of the organization in the selected future time horizons

By improving energy efficiency, a company can reduce its energy consumption, leading to lower utility bills and operating costs. More efficient equipment and processes often require less maintenance and can result in longer lifespans, cutting down on repair and replacement costs. As operational costs decrease while revenue remains stable or increases, profit margins will likely improve, positively impacting the company's overall financial position. Companies that adopt energy-efficient practices may become more competitive due to lower costs, allowing them to price competitively while maintaining profitability, which can enhance market positioning. As operational costs decrease, free cash flow can increase, providing more funds for investments, dividends, or debt repayment.

(3.6.1.15) Are you able to quantify the financial effects of the opportunity?

Select from:

☑ Yes

(3.6.1.21) Anticipated financial effect figure in the long-term - minimum (currency)

838057050

(3.6.1.22) Anticipated financial effect figure in the long-term – maximum (currency)

83205750

(3.6.1.23) Explanation of financial effect figures

Additional costs for the purchase of electricity from third parties, associated with tariffs that are increasing due to the tightening of carbon regulation, as well as the modernization and commissioning of new power assets.

(3.6.1.24) Cost to realize opportunity

308594560

(3.6.1.25) Explanation of cost calculation

Improving the Company's energy efficiency is a minimum plan, with a more significant rise in the cost of energy resources, the MACC-analysis demonstrates that KMG is able to increase the number of energy efficiency measures.

(3.6.1.26) Strategy to realize opportunity

The possibility of improving operational efficiency, based on the recommendations of energy audits, proposals from the energy services of KMG subsidiaries and affiliates was assessed. A MACC analysis was carried out, which ranked the measures in terms of payback, taking into account the price of carbon. The implementation of the planned set of measures will reduce the energy intensity of the Company by 10%.

Water

(3.6.1.1) Opportunity identifier

Select from:

☑ Opp1

(3.6.1.3) Opportunity type and primary environmental opportunity driver

Reputational capital

☑ Strengthened social license to operate

(3.6.1.4) Value chain stage where the opportunity occurs

Select from:

☑ Direct operations

(3.6.1.5) Country/area where the opportunity occurs

Select all that apply

☑ Kazakhstan

(3.6.1.6) River basin where the opportunity occurs

Select all that apply

☑ Other, please specify :Caspian sea

(3.6.1.8) Organization specific description

KMG implements social projects aimed at solving water supply issues in the regions where it operates, such as "Reconstruction of the Astrakhan-Mangyshlak Water Main" and "Construction of Seawater Desalination Plant in Kenderli". In December 2023, the implementation of the first stage of the project "Reconstruction and Expansion of the Astrakhan-Mangyshlak Water Main" was completed. The Astrakhan Mangyshlak Water Main is the only centralised source of water supply for consumers in Kurmangazy, Isatai and Zhylyoi Districts of Atyrau Region, as well as for Zhanaozen, Beineu, Mangistau, Karakiya and Tulparagan Districts of Mangistau Region. In 2024, a seawater desalination plant with a capacity of 50 thousand m3/day was under construction. In 2022,a desalination plant for produced water was launched at the Karazhanbas field of Karazhanbasmunai JSC in the Mangistau region, designed to resolve the issue of water supply to the field. Upon reaching full capacity, the processing of produced water will amount to 42.5 thousand m3 / day, while the production of desalinated water will reach 17.0 thousand m3 / day, which will free up a significant volume of water for the needs of the region's population. Implementation results to date: in 2023 the volume of water intake decreased by 2.6 million m³; in 2024 - by 4.07 million m³ compared to 6.3 million m³ in 2022.

(3.6.1.9) Primary financial effect of the opportunity

Select from:

☑ Returns on investment in low-emission technology

(3.6.1.10) Time horizon over which the opportunity is anticipated to have a substantive effect on the organization

Select all that apply

☑ Long-term

(3.6.1.11) Likelihood of the opportunity having an effect within the anticipated time horizon

Select from:

☑ Very likely (90–100%)

(3.6.1.12) Magnitude

Select from:

☑ Unknown

(3.6.1.14) Anticipated effect of the opportunity on the financial position, financial performance and cash flows of the organization in the selected future time horizons

Reliable water supply can lead to increased efficiency in extraction and refining processes. This can boost production levels, thereby generating higher revenues

(3.6.1.15) Are you able to quantify the financial effects of the opportunity?

Select from:

☑ No

(3.6.1.24) Cost to realize opportunity

235507078

(3.6.1.25) Explanation of cost calculation

The amount includes the costs of implementing the Astrakhan-Mangylshak project. The calculations of the financial costs of the opportunity of other projects will be carried out later, after the potential for project implementation is determined. The cost provided in local currency.

(3.6.1.26) Strategy to realize opportunity

Social projects are still at the implementation stage, the financial cost will be specified based on the results of the project.

Climate change

(3.6.1.1) Opportunity identifier

Select from:

☑ Opp2

(3.6.1.3) Opportunity type and primary environmental opportunity driver

Products and services

☑ Other products and services opportunity, please specify :Development and/or expansion of low emission goods and services

(3.6.1.4) Value chain stage where the opportunity occurs

Select from:

☑ Direct operations

(3.6.1.5) Country/area where the opportunity occurs

Select all that apply

☑ Kazakhstan

(3.6.1.8) Organization specific description

KMG plans to implement RES projects both for its own needs and for the sale of green energy to third parties. At the same time, producing gas at its own fields, KMG is able to independently carry out the construction of gas plants to compensate for the time of lower energy production from RES. This significantly increases the Company's competitiveness in comparison with Renewable Energy facilities, which have to seek balancing capacity in the general market or install batteries.

(3.6.1.9) Primary financial effect of the opportunity

Select from:

☑ Increased revenues resulting from increased demand for products and services

(3.6.1.10) Time horizon over which the opportunity is anticipated to have a substantive effect on the organization

Select all that apply

☑ Long-term

(3.6.1.11) Likelihood of the opportunity having an effect within the anticipated time horizon

Select from:

☑ Very likely (90–100%)

(3.6.1.12) Magnitude

Select from:

☑ Medium

(3.6.1.14) Anticipated effect of the opportunity on the financial position, financial performance and cash flows of the organization in the selected future time horizons

Engaging in RES projects can diversify revenue streams beyond traditional oil and gas operations, potentially providing a new income source. Companies that diversify into renewables may strengthen their market positioning and appeal to socially conscious investors. Transitioning to or integrating RES projects may require substantial upfront capital investment, potentially impacting short-term cash flow negatively. Governments often support RES projects through incentives, which can improve cash flow by reducing net costs or providing additional revenue.

(3.6.1.15) Are you able to quantify the financial effects of the opportunity?

Select from:

☑ Yes

(3.6.1.21) Anticipated financial effect figure in the long-term - minimum (currency)

237825264

(3.6.1.22) Anticipated financial effect figure in the long-term – maximum (currency)

237825264

(3.6.1.23) Explanation of financial effect figures

It takes into account revenues from the sale of green energy and carbon offsets.

(3.6.1.24) Cost to realize opportunity

454112335

(3.6.1.25) Explanation of cost calculation

The estimate is based on the assumption that construction of one MW of RES costs 1,500,000. KMG plans to build at least 300 MW of RES.

(3.6.1.26) Strategy to realize opportunity

KMG plans to implement RES projects both for its own needs and for the sale of green energy to third parties. At the same time, producing gas at its own fields, KMG is able to independently carry out the construction of gas plants to compensate for the time of lower energy production from RES. This significantly increases the Company's competitiveness in comparison with Renewable Energy facilities, which have to seek balancing capacity in the general market or install batteries.

Climate change

(3.6.1.1) Opportunity identifier

Select from:

☑ Opp3

(3.6.1.3) Opportunity type and primary environmental opportunity driver

Products and services

☑ Ability to diversify business activities

(3.6.1.4) Value chain stage where the opportunity occurs

Select from:

☑ Direct operations

(3.6.1.5) Country/area where the opportunity occurs

Select all that apply

☑ Kazakhstan

(3.6.1.8) Organization specific description

KMG has experience in producing gray hydrogen, which is used in the production of petroleum products. In order to reduce greenhouse gas emissions, KMG is studying the possibility of producing blue hydrogen (since KMG has gas resources) or green hydrogen (since the construction of renewable energy sources is planned). In addition, KMG is considering the possibility of selling carbon-neutral hydrogen to metallurgical companies in Kazakhstan

(3.6.1.9) Primary financial effect of the opportunity

Select from:

☑ Other, please specify :Revenue increase through the sale of carbon credits and carbon offsets

(3.6.1.10) Time horizon over which the opportunity is anticipated to have a substantive effect on the organization

Select all that apply

☑ Medium-term

(3.6.1.11) Likelihood of the opportunity having an effect within the anticipated time horizon

Select from:

☑ Very likely (90–100%)

(3.6.1.12) Magnitude

Select from:

☑ Medium

(3.6.1.14) Anticipated effect of the opportunity on the financial position, financial performance and cash flows of the organization in the selected future time horizons

As companies expand into grey hydrogen production, they may create new revenue streams beyond traditional oil and gas, potentially stabilizing income in the face of fluctuating fossil fuel prices.

(3.6.1.15) Are you able to quantify the financial effects of the opportunity?

Select from:

☑ Yes

(3.6.1.19) Anticipated financial effect figure in the medium-term - minimum (currency)

959648

(3.6.1.20) Anticipated financial effect figure in the medium-term - maximum (currency)

57068949

(3.6.1.23) Explanation of financial effect figures

In the minimal impact, the estimation is based on the amount surplus and the price of credits that KMG can sell. In the maximum estimate we also take into account the possibility of selling carbon credits from the construction of Renewable Energy facilities.

(3.6.1.24) Cost to realize opportunity

397765

(3.6.1.25) Explanation of cost calculation

The costs include only the costs of validation and verification of offset projects, as KMG receives credits on a free basis, and RES projects will be built under the policy of diversification of the business and increasing the energy security of the Company.

(3.6.1.26) Strategy to realize opportunity

KMG made a a breakdown into minimal and maximal effect, as KMG being a national company of Kazakhstan must obtain approval from the Government of the Republic of Kazakhstan for the types of activities it plans to carry out.

Climate change

(3.6.1.1) Opportunity identifier

Select from:

☑ Opp4

(3.6.1.3) Opportunity type and primary environmental opportunity driver

Products and services

☑ Development of new products or services through R&D and innovation

(3.6.1.4) Value chain stage where the opportunity occurs

Select from:

☑ Downstream value chain

(3.6.1.5) Country/area where the opportunity occurs

Select all that apply

☑ Kazakhstan

(3.6.1.8) Organization specific description

KMG has experience in the production of gray hydrogen, which is being used in the production of petroleum products. In order to reduce greenhouse gas emissions, KMG is studying the possibility of production of blue hydrogen (as KMG has gas resources) or green hydrogen (as RES construction are planned). In addition, KMG is considering selling carbon-neutral hydrogen to metallurgical companies in Kazakhstan.

(3.6.1.9) Primary financial effect of the opportunity

Select from:

☑ Other, please specify :Opportunity to generate additional revenue through the sale of new low-carbon products

(3.6.1.10) Time horizon over which the opportunity is anticipated to have a substantive effect on the organization

Select all that apply

☑ Long-term

(3.6.1.11) Likelihood of the opportunity having an effect within the anticipated time horizon

Select from:

☑ Likely (66–100%)

(3.6.1.12) Magnitude

Select from:

☑ Unknown

(3.6.1.14) Anticipated effect of the opportunity on the financial position, financial performance and cash flows of the organization in the selected future time horizons

If oil and gas companies invest in green hydrogen production, they can diversify their energy portfolios. This diversification may help mitigate risks associated with fluctuating oil prices and regulatory changes aimed at reducing carbon emissions. It can also provide new revenue streams as demand for cleaner energy solutions increases. On the other hand Transitioning to green hydrogen production typically requires significant capital investment in new technologies, infrastructure, and production facilities. While this can strain short-term financials, successful investment can lead to long-term growth and profitability. Companies will need to carefully manage their capital expenditures to avoid over-leverage.

(3.6.1.15) Are you able to quantify the financial effects of the opportunity?

Select from:

☑ No

(3.6.1.24) Cost to realize opportunity

0

(3.6.1.25) Explanation of cost calculation

Detailed calculations of the financial costs of the opportunity will be carried out later, after the potential for project implementation is determined.

(3.6.1.26) Strategy to realize opportunity

KMG has formed a Competence Center in the field of Hydrogen energy on the basis of KM Engineering LLP, attracting its own scientists and scientists from universities and research centers engaged in the production of hydrogen with zero or low carbon dioxide emissions. Further, this group will have to assess the potential of using blue/green hydrogen on the assets of KMG and other Kazakhstani companies, assess the necessary production costs and possible revenues from the sale of such types of hydrogen

Climate change

(3.6.1.1) Opportunity identifier

Select from:

☑ Opp5

(3.6.1.3) Opportunity type and primary environmental opportunity driver

Products and services

☑ Development of new products or services through R&D and innovation

(3.6.1.4) Value chain stage where the opportunity occurs

Select from:

☑ Upstream value chain

(3.6.1.5) Country/area where the opportunity occurs

Select all that apply

☑ Kazakhstan

(3.6.1.8) Organization specific description

KMG started studying the use of CCUS technology to carbon capture and storage. KMG sees an opportunity to use carbon injection to increase the oil recovery factor of old fields. In addition, KMG believes that carbon injection and storage can be performed in exhausted wells, either from its own or from third parties.

(3.6.1.9) Primary financial effect of the opportunity

Select from:

☑ Other, please specify :Reduction of carbon costs and revenue growth by increasing the oil recovery factor

(3.6.1.10) Time horizon over which the opportunity is anticipated to have a substantive effect on the organization

Select all that apply

☑ Long-term

(3.6.1.11) Likelihood of the opportunity having an effect within the anticipated time horizon

Select from:

☑ Very likely (90–100%)

(3.6.1.12) Magnitude

Select from:

☑ Medium-high

(3.6.1.14) Anticipated effect of the opportunity on the financial position, financial performance and cash flows of the organization in the selected future time horizons

Companies adopting CCUS may enhance their reputation among consumers, investors, and stakeholders, potentially leading to increased market share and customer loyalty. A strong commitment to CCUS could attract environmentally conscious investors and access to green financing, which can improve the financial position. Companies could find revenue streams in utilizing captured CO2 for enhanced oil recovery (EOR) or in the production of commercially viable products (e.g., chemicals, fuels, or building materials). Companies that capture and store carbon could generate carbon credits, allowing them to participate in carbon trading markets for additional revenue.

(3.6.1.15) Are you able to quantify the financial effects of the opportunity?

Select from:

☑ No

(3.6.1.24) Cost to realize opportunity

0

(3.6.1.25) Explanation of cost calculation

Detailed calculations of financial costs for the implementation of this opportunity will be carried out later, after the project implementation potential is determined.

(3.6.1.26) Strategy to realize opportunity

KMG, together with KMG Engineering and with the support of Chevron Corporation, is working on the implementation of a pilot project for the capture, storage and use of CO2 (CCUS). At the present KMG completed the research and the technical and economic analysis aimed at assessing the technical potential and economic feasibility of the pilot project. In particularly: - the Company carried out the screening of concentrated sources of CO2 emissions in Atyrau and Mangystau regions; - search for available reservoirs (traps) located within a radius of up to 100 km from concentrated sources and corresponding to the requirements of CO2 disposal has been performed;

Climate change

(3.6.1.1) Opportunity identifier

Select from:

☑ Opp6

(3.6.1.3) Opportunity type and primary environmental opportunity driver

Products and services

☑ Other products and services opportunity, please specify :Development and/or expansion of low emission goods and services

(3.6.1.4) Value chain stage where the opportunity occurs

Select from:

☑ Direct operations

(3.6.1.5) Country/area where the opportunity occurs

Select all that apply

☑ Kazakhstan

(3.6.1.8) Organization specific description

Implementation of the forest climate project - the first offset project based on natural solutions to minimize the carbon footprint and increase the ESG rating of the Company.

(3.6.1.9) Primary financial effect of the opportunity

Select from:

☑ Increased revenues resulting from increased demand for products and services

(3.6.1.10) Time horizon over which the opportunity is anticipated to have a substantive effect on the organization

Select all that apply

☑ Short-term

(3.6.1.11) Likelihood of the opportunity having an effect within the anticipated time horizon

Select from:

☑ Virtually certain (99–100%)

(3.6.1.12) Magnitude

Select from:

☑ Medium-high

(3.6.1.14) Anticipated effect of the opportunity on the financial position, financial performance and cash flows of the organization in the selected future time horizons

Participating in forest climate projects, like carbon offsetting through reforestation or afforestation, may help these companies meet regulatory requirements, potentially avoiding fines and improving their standing with regulatory bodies. Investing in forest climate projects can allow to generate carbon credits. These credits can be sold in carbon markets, providing an additional revenue stream. The financial gain from these credits can enhance the company's overall financial position. Engaging in sustainability initiatives can improve the public perception. This can lead to increased customer loyalty, attract socially conscious investors, and generally enhance brand value. Improved reputation can translate into better performance in the stock market and more favorable business opportunities.

(3.6.1.15) Are you able to quantify the financial effects of the opportunity?

Select from:

☑ No

(3.6.1.24) Cost to realize opportunity

2650000

(3.6.1.25) Explanation of cost calculation

Detailed calculations of financial costs for the implementation of this opportunity will be carried out later, after the project implementation potential is determined.

(3.6.1.26) Strategy to realize opportunity

As part of its ESG policy, KMG plans to implement a project to increase the forest cover of Kazakhstan. To do this, in 2023, it is planned to carry out survey work on the selection of land plots, tree crops and develop a working draft.

Water

(3.6.1.1) Opportunity identifier

Select from:

☑ Opp2

(3.6.1.3) Opportunity type and primary environmental opportunity driver

Resource efficiency

☑ Use of new technologies

(3.6.1.4) Value chain stage where the opportunity occurs

Select from:

☑ Downstream value chain

(3.6.1.5) Country/area where the opportunity occurs

Select all that apply

☑ Kazakhstan

(3.6.1.6) River basin where the opportunity occurs

Select all that apply

☑ Ural

(3.6.1.8) Organization specific description

One of KMG's initiatives is to address issues of fresh water conservation, where the Company is implementing projects to reduce discharges and reduce fresh water intake from natural sources. One of the significant projects is the TAZALYQ project at the Atyrau Oil Refinery, aimed at modernizing mechanical treatment facilities and constructing modern treatment facilities.

(3.6.1.9) Primary financial effect of the opportunity

Select from:

☑ Increased value of fixed assets

(3.6.1.10) Time horizon over which the opportunity is anticipated to have a substantive effect on the organization

Select all that apply

☑ Long-term

(3.6.1.11) Likelihood of the opportunity having an effect within the anticipated time horizon

Select from:

☑ Very likely (90–100%)

(3.6.1.12) Magnitude

Select from:

☑ High

(3.6.1.14) Anticipated effect of the opportunity on the financial position, financial performance and cash flows of the organization in the selected future time horizons

Improving wastewater quality and reducing tax costs.

(3.6.1.15) Are you able to quantify the financial effects of the opportunity?

Select from:

☑ No

(3.6.1.24) Cost to realize opportunity

16586382

(3.6.1.25) Explanation of cost calculation

The amount includes the costs of implementing the project TAZALYQ: reconstruction of mechanical treatment facilities (MTF) within the framework of the TAZALYQ project, which will increase the capacity of MTF by 2 times and achieve the maximum permissible discharge limits for the content of oil products and suspended solids in wastewater sent to the biological treatment unit and reconstruction of regulatory treated effluent canal and reclamation of Atyrau Refinery evaporation fields. The cost provided in local currency.

(3.6.1.26) Strategy to realize opportunity

According to the Environmental Policy, KMG has committed to ensuring continuous improvement of water management processes, implementing water conservation and recycling projects, assessing and managing risks associated with water shortages. One of the activities of which is the implementation of the TAZALYQ project.

Climate change

(3.6.1.1) Opportunity identifier

Select from:

☑ Opp7

(3.6.1.3) Opportunity type and primary environmental opportunity driver

Products and services

☑ Other products and services opportunity, please specify :Sustainable aviation fuel

(3.6.1.4) Value chain stage where the opportunity occurs

Select from:

☑ Downstream value chain

(3.6.1.5) Country/area where the opportunity occurs

Select all that apply

☑ Kazakhstan

(3.6.1.8) Organization specific description

Sustainable Aviation Fuel (SAF) is one of KMG's strategic low-carbon initiatives. The company views SAF as a promising product to diversify its portfolio and support decarbonization of the aviation sector. Key steps taken by KMG in SAF development: Feasibility study: In 2024, with the support of ICF SH&E Limited, KMG completed a study on the potential for SAF production in Kazakhstan. Market analysis: Key export markets were identified, including the European Union, where demand for SAF is rapidly increasing due to stricter aviation requirements. Project potential: Preliminary technological solutions were developed, with the first plant designed for up to 40,000 tonnes of SAF per year, requiring approximately 72,000 tonnes of bioethanol as feedstock. Next steps: A feasibility study (FS) is scheduled for 2025. Strategic importance for KMG Diversification: SAF offers a new avenue in refining and production of low-carbon products. Alignment with global trends: As aviation moves toward decarbonization, KMG aims to establish itself in this emerging market. Export potential: SAF production can strengthen Kazakhstan's position as a supplier of "green" solutions for the international aviation industry.

(3.6.1.9) Primary financial effect of the opportunity

Select from:

☑ Increased revenues through access to new and emerging markets

(3.6.1.10) Time horizon over which the opportunity is anticipated to have a substantive effect on the organization

Select all that apply

☑ Long-term

(3.6.1.11) Likelihood of the opportunity having an effect within the anticipated time horizon

Select from:

☑ Very likely (90–100%)

(3.6.1.12) Magnitude

Select from:

☑ High

(3.6.1.14) Anticipated effect of the opportunity on the financial position, financial performance and cash flows of the organization in the selected future time horizons

SAF production can strengthen Kazakhstan’s position as a supplier of “green” solutions for the international aviation industry.

(3.6.1.15) Are you able to quantify the financial effects of the opportunity?

Select from:

☑ No

(3.6.1.24) Cost to realize opportunity

0

(3.6.1.25) Explanation of cost calculation

A feasibility study (FS) is ongoing. The results will be at the end of 2025

(3.6.1.26) Strategy to realize opportunity

as commitment at Low carbon Developmet Programme of KMG
[Add row]

(3.6.2) Provide the amount and proportion of your financial metrics in the reporting year that are aligned with the substantive effects of environmental opportunities.

Climate change

(3.6.2.1) Financial metric

Select from:

☑ CAPEX

(3.6.2.2) Amount of financial metric aligned with opportunities for this environmental issue (unit currency as selected in 1.2)

1432230000

(3.6.2.3) % of total financial metric aligned with opportunities for this environmental issue

Select from:

☑ 1-10%

(3.6.2.4) Explanation of financial figures

At the moment, the Company has a number of projects on the implementation of which it is working both jointly and under partnership agreements. KMG selected 8 projects to assess their possible mitigation of transition and climate risks in different scenarios. Tightening climate policy in the country will stimulate a more active launch of investment projects and implementation of the decarbonization strategy.

Water

(3.6.2.1) Financial metric

Select from:

☑ CAPEX

(3.6.2.2) Amount of financial metric aligned with opportunities for this environmental issue (unit currency as selected in 1.2)

12805415

(3.6.2.3) % of total financial metric aligned with opportunities for this environmental issue

Select from:

☑ 1-10%

(3.6.2.4) Explanation of financial figures

The figure represents the ratio of total capital expenditures for the implementation of water resources management projects in 2024 to the total revenue of the enterprise. For exmple, the CAPEX project (downstream) that pursued the replacement of the ionic mass for two mixed bed filters used for waster demineralization. Considering the ionic mass existing in these filters has reached its maximum life span, this approach has reduced the specific consumption of water for washing and reintroducing them into the flow.

Water

(3.6.2.1) Financial metric

Select from:

☑ OPEX

(3.6.2.2) Amount of financial metric aligned with opportunities for this environmental issue (unit currency as selected in 1.2)

1118794466

(3.6.2.3) % of total financial metric aligned with opportunities for this environmental issue

Select from:

☑ 1-10%

(3.6.2.4) Explanation of financial figures

At the moment, there are several projects are under implementation on water management.
[Add row]

C4. Governance

(4.1) Does your organization have a board of directors or an equivalent governing body?

(4.1.1) Board of directors or equivalent governing body

Select from:

☑ Yes

(4.1.2) Frequency with which the board or equivalent meets

Select from:

☑ Quarterly

(4.1.3) Types of directors your board or equivalent is comprised of

Select all that apply

☑ Independent non-executive directors or equivalent

(4.1.4) Board diversity and inclusion policy

Select from:

☑ Yes, and it is publicly available

(4.1.5) Briefly describe what the policy covers

Regulation on the Board of Directors of Joint-Stock Company "National Company "KazMunayGas" item 3.1.9. The diversity in experience, personal characteristics and gender shall be ensured in the composition of the BoD.

(4.1.6) Attach the policy (optional)

Regulation on the KMG BoD_with amend and addit 2025.pdf
[Fixed row]

(4.1.1) Is there board-level oversight of environmental issues within your organization?

	Board-level oversight of this environmental issue
Climate change	*Select from:* ☑ Yes
Water	*Select from:* ☑ Yes
Biodiversity	*Select from:* ☑ Yes

[Fixed row]

(4.1.2) Identify the positions (do not include any names) of the individuals or committees on the board with accountability for environmental issues and provide details of the board's oversight of environmental issues.

Climate change

(4.1.2.1) Positions of individuals or committees with accountability for this environmental issue

Select all that apply

☑ Chief Executive Officer (CEO)

☑ Chief Risk Officer (CRO)

☑ Other C-Suite Officer

☑ Board-level committee

☑ Other, please specify :Deputy Chairman of the Management Board

(4.1.2.2) Positions' accountability for this environmental issue is outlined in policies applicable to the board

Select from:

☑ Yes

(4.1.2.3) Policies which outline the positions' accountability for this environmental issue

Select all that apply

☑ Board Terms of Reference

☑ Individual role descriptions

(4.1.2.4) Frequency with which this environmental issue is a scheduled agenda item

Select from:

☑ Scheduled agenda item in every board meeting (standing agenda item)

(4.1.2.5) Governance mechanisms into which this environmental issue is integrated

Select all that apply

☑ Reviewing and guiding annual budgets

☑ Overseeing and guiding scenario analysis

☑ Overseeing the setting of corporate targets

☑ Monitoring progress towards corporate targets

☑ Approving corporate policies and/or commitments

☑ Overseeing reporting, audit, and verification processes

☑ Monitoring the implementation of a climate transition plan

☑ Overseeing and guiding the development of a business strategy

☑ Overseeing and guiding acquisitions, mergers, and divestitures

☑ Monitoring supplier compliance with organizational requirements

☑ Monitoring compliance with corporate policies and/or commitments

☑ Overseeing and guiding the development of a climate transition plan

☑ Reviewing and guiding the assessment process for dependencies, impacts, risks, and opportunities

☑ Overseeing and guiding public policy engagement

☑ Reviewing and guiding innovation/R&D priorities

☑ Approving and/or overseeing employee incentives

☑ Overseeing and guiding major capital expenditures

☑ Monitoring the implementation of the business strategy

(4.1.2.7) Please explain

In accordance with the Corporate Governance Code (approved by Government Decree of the Republic of Kazakhstan dated November 5, 2012 No. 1403) The Board of Directors,within their competence, ensures the formation of an appropriate system in the field of sustainable development and its implementation, and officials and all employees at all levels contribute to low-carbon development. The Board of Directors approves the climate change policy and strategy, energy and climate change goals, climate risks. The Chairman of the Management Board is the highest executive level of the company for making strategic decisions and determining areas of activity in relation to climate change. In particular, his responsibilities in this regard are as follows: - proposes a Low-Carbon Development Program and climate change goals and monitor their implementation. - supervises the implementation of the Low-Carbon Development Program and regularly analyzes the dynamics of GHG emissions and compliance with climate change mitigation goals. In order to systematize the main approaches and measures in the field of carbon footprint reduction, the Company has developed a Low-carbon Development Program until 2060. Deputy Chairman of the Management Board of KMG, responsible for sustainable development issues, including low-carbon development issues. Deputy Chairman coordinates approaches to achieving goals and KPIs for initiatives in the field of sustainable development, low carbon developmemt and controls the implementation of corporate standards in the field of sustainable development, controls the preparation of a report on sustainable development and the achievement of the SDGs. At the same time, there is the Committee on Safety, Labor Protection, Environment and Sustainable Development of the Board of Directors of JSC NC "KazMunayGas". In 2024, the Health, Safety, Environment and Sustainable Development Committee held 10 meetings and reviewed 55 issues related to integrating sustainability into KMG's business processes. Key activities in 2024: - Guiding sustainability integration into KMG's core processes; - Overseeing ESG strategies and initiatives; Monitoring occupational health, industrial safety, and environmental protection; - Developing and approving internal documentation and action plans on sustainability; - The Committee reviewed and approved KMG's 2023 Sustainability Report. COMMITTEE'S KEY AGENDA ITEMS IN 2024: - Reports on labor protection, safety, and environment; - Implementation of KMG's Low-Carbon Development Program (2022–2031); - ESG rating assessment and improvement plans; - Introducing sustainability systems across business units; - Contribution to UN Sustainable Development Goals; - Approval of KMG's Low-Carbon Development Program to 2060; - Analysis of significant health, safety, and industrial risk incidents.

Water

(4.1.2.1) Positions of individuals or committees with accountability for this environmental issue

Select all that apply

☑ Chief Executive Officer (CEO)

☑ Chief Risk Officer (CRO)

☑ Other C-Suite Officer

☑ Board-level committee

☑ Other, please specify :Deputy Chairman of the Management Board

(4.1.2.2) Positions' accountability for this environmental issue is outlined in policies applicable to the board

Select from:

☑ Yes

(4.1.2.3) Policies which outline the positions' accountability for this environmental issue

Select all that apply

☑ Board Terms of Reference

☑ Individual role descriptions

(4.1.2.4) Frequency with which this environmental issue is a scheduled agenda item

Select from:

☑ Scheduled agenda item in every board meeting (standing agenda item)

(4.1.2.5) Governance mechanisms into which this environmental issue is integrated

Select all that apply

☑ Reviewing and guiding annual budgets

☑ Overseeing and guiding scenario analysis

☑ Overseeing the setting of corporate targets

☑ Monitoring progress towards corporate targets

☑ Approving corporate policies and/or commitments

☑ Overseeing reporting, audit, and verification processes

☑ Monitoring the implementation of a climate transition plan

☑ Overseeing and guiding the development of a business strategy

☑ Overseeing and guiding acquisitions, mergers, and divestitures

☑ Monitoring supplier compliance with organizational requirements

☑ Monitoring compliance with corporate policies and/or commitments

☑ Overseeing and guiding the development of a climate transition plan

☑ Reviewing and guiding the assessment process for dependencies, impacts, risks, and opportunities

☑ Overseeing and guiding public policy engagement

☑ Reviewing and guiding innovation/R&D priorities

☑ Approving and/or overseeing employee incentives

☑ Overseeing and guiding major capital expenditures

☑ Monitoring the implementation of the business strategy

(4.1.2.7) Please explain

The Board of Directors recognizes the high priority of environmental protection and the life and health of the Company's employees and contractors at all of its production facilities, the development of human resources and commitment to generally recognized global goals in the field of sustainable development, and therefore defines sustainable development and progressive reduction of carbon intensity of production as one of the main strategic goals of KMG and the agenda of the global

investment community. KMG Group's HSE Policy is based on top management's commitment to HSE issues and is aimed at involving each employee in the development of a safety culture. As part of the review of KMG's HSE information, which is considered at each in-person meeting of the Board of Directors, the instructions were given to promptly inform the Board of Directors' members of any HSE incidents in KMG Group companies, regardless of the reporting period. Environment and Sustainability Committee of KMG's Board of Directors regularly reviews and discusses reports on implementation of the sustainability system in KMG and its business units and incorporation of sustainability principles into key business processes. On July 1, 2019, within the framework of the HSE Forum for KMG General Directors, the Chairman of the Management Board signed a personal Statement of Commitment to the rational management of water resources (8 water principles of KMG). This initiative was supported by the chief executives of subsidiaries and affiliates of KMG, signing similar statements of commitment on behalf of their companies. The signed statements of commitment are posted on the official websites of the KMG group of companies. Also, with the adoption of the Corporate Water Standard on December 20, 2018, the Chairman of the KMG Management Board took responsibility for providing the necessary resources (financial, material and human) to fulfill the provisions of the Standard. In order to improve the efficiency of use and protection of water resources, as well as to determine measures and targets to reduce water intake, increase water reuse and reduce the volume of pollutant discharges, the KazMunayGas NC JSC group of companies has developed a Water Resources Management Program for the period up to 2033.

Biodiversity

(4.1.2.1) Positions of individuals or committees with accountability for this environmental issue

Select all that apply

☑ Chief Executive Officer (CEO)

☑ Chief Risk Officer (CRO)

☑ Other C-Suite Officer

☑ Board-level committee

☑ Other, please specify :Deputy Chairman of the Management Board

(4.1.2.2) Positions' accountability for this environmental issue is outlined in policies applicable to the board

Select from:

☑ Yes

(4.1.2.3) Policies which outline the positions' accountability for this environmental issue

Select all that apply

☑ Board Terms of Reference

☑ Individual role descriptions

(4.1.2.4) Frequency with which this environmental issue is a scheduled agenda item

Select from:

☑ Scheduled agenda item in every board meeting (standing agenda item)

(4.1.2.5) Governance mechanisms into which this environmental issue is integrated

Select all that apply

☑ Overseeing and guiding scenario analysis

(4.1.2.7) Please explain

The Board of Directors recognizes the high priority of environmental protection and the life and health of the Company's employees and contractors at all of its production facilities, the development of human resources and commitment to generally recognized global goals in the field of sustainable development, and therefore defines sustainable development and progressive reduction of carbon intensity of production as one of the main strategic goals of KMG and the agenda of the global investment community. Environment and Sustainability Committee of KMG's Board of Directors regularly reviews and discusses reports on implementation of the sustainability system in KMG and its business units and incorporation of sustainability principles into key business processes. The company has an environmental policy that provides for environmental risk management and the adoption of all possible measures to reduce the impact of taking into account the impact on biodiversity and preserving the migration route of animals when planning and implementing production activities. In 2025, it is planned to develop a Biodiversity Conservation Program.
[Fixed row]

(4.2) Does your organization's board have competency on environmental issues?

Climate change

(4.2.1) Board-level competency on this environmental issue

Select from:

☑ Yes

(4.2.2) Mechanisms to maintain an environmentally competent board

Select all that apply

☑ Consulting regularly with an internal, permanent, subject-expert working group

☑ Engaging regularly with external stakeholders and experts on environmental issues

☑ Regular training for directors on environmental issues, industry best practice, and standards (e.g., TCFD, SBTi)

☑ Having at least one board member with expertise on this environmental issue

(4.2.3) Environmental expertise of the board member

Experience

☑ Experience in an academic role focused on environmental issues

☑ Experience in the environmental department of a government (national or local)

Water

(4.2.1) Board-level competency on this environmental issue

Select from:

☑ Yes

(4.2.2) Mechanisms to maintain an environmentally competent board

Select all that apply

☑ Consulting regularly with an internal, permanent, subject-expert working group

☑ Engaging regularly with external stakeholders and experts on environmental issues

☑ Integrating knowledge of environmental issues into board nominating process

☑ Regular training for directors on environmental issues, industry best practice, and standards (e.g., TCFD, SBTi)

[Fixed row]

(4.3) Is there management-level responsibility for environmental issues within your organization?

	Management-level responsibility for this environmental issue
Climate change	*Select from:* ☑ Yes
Water	*Select from:* ☑ Yes
Biodiversity	*Select from:* ☑ Yes

[Fixed row]

(4.3.1) Provide the highest senior management-level positions or committees with responsibility for environmental issues (do not include the names of individuals).

Climate change

(4.3.1.1) Position of individual or committee with responsibility

Executive level

☑ Chief Executive Officer (CEO)

(4.3.1.2) Environmental responsibilities of this position

Dependencies, impacts, risks and opportunities

☑ Assessing environmental dependencies, impacts, risks, and opportunities

☑ Assessing future trends in environmental dependencies, impacts, risks, and opportunities

☑ Managing environmental dependencies, impacts, risks, and opportunities

Policies, commitments, and targets

☑ Setting corporate environmental policies and/or commitments

☑ Setting corporate environmental targets

Strategy and financial planning

☑ Developing a business strategy which considers environmental issues

☑ Developing a climate transition plan

☑ Implementing a climate transition plan

☑ Managing annual budgets related to environmental issues

☑ Managing priorities related to innovation/low-environmental impact products or services (including R&D)

(4.3.1.4) Reporting line

Select from:

☑ Reports to the board directly

(4.3.1.5) Frequency of reporting to the board on environmental issues

Select from:

☑ Quarterly

(4.3.1.6) Please explain

The Chairman of the Management Board is the highest executive level of the company for making strategic decisions and determining areas of activity in relation to climate change. In particular, its responsibilities in this regard are as follows: - propose a Low-carbon Development Program and climate change goals and monitor their implementation; - supervises the implementation of the Low-Carbon Development Program and periodically analyzes the dynamics of GHG emissions and compliance with climate change mitigation goals (GHG emissions reduction and carbon intensity index).

Water

(4.3.1.1) Position of individual or committee with responsibility

Executive level

☑ Chief Executive Officer (CEO)

(4.3.1.2) Environmental responsibilities of this position

Dependencies, impacts, risks and opportunities

☑ Assessing environmental dependencies, impacts, risks, and opportunities

☑ Assessing future trends in environmental dependencies, impacts, risks, and opportunities

☑ Managing environmental dependencies, impacts, risks, and opportunities

Engagement

☑ Managing supplier compliance with environmental requirements

Policies, commitments, and targets

☑ Measuring progress towards environmental science-based targets

Strategy and financial planning

☑ Implementing the business strategy related to environmental issues

(4.3.1.4) Reporting line

Select from:

☑ Reports to the board directly

(4.3.1.5) Frequency of reporting to the board on environmental issues

Select from:

☑ Quarterly

(4.3.1.6) Please explain

The Chairman of the Management Board is the highest executive level of the company for making strategic decisions and determining areas of activity in relation to water resourse. In particular, the Chairman of the Management Board is responsible for: - facilitating the implementation of all principles specified in the Water Resources Management Program; - providing the necessary resources (financial, material and human) to implement the provisions of the Program.

Biodiversity

(4.3.1.1) Position of individual or committee with responsibility

Executive level

☑ Chief Executive Officer (CEO)

(4.3.1.2) Environmental responsibilities of this position

Dependencies, impacts, risks and opportunities

☑ Assessing future trends in environmental dependencies, impacts, risks, and opportunities

(4.3.1.4) Reporting line

Select from:

☑ Reports to the board directly

(4.3.1.5) Frequency of reporting to the board on environmental issues

Select from:

☑ As important matters arise

(4.3.1.6) Please explain

The Chairman of the Management Board is the highest executive level of the company for making strategic decisions and determining areas of activity in relation to Biodiversity resourse. In 2025, it is planned to develop a Biodiversity Conservation Program.

Climate change

(4.3.1.1) Position of individual or committee with responsibility

Executive level

☑ Chief Financial Officer (CFO)

(4.3.1.2) Environmental responsibilities of this position

Strategy and financial planning

☑ Developing a climate transition plan

☑ Managing annual budgets related to environmental issues

(4.3.1.4) Reporting line

Select from:

☑ Reports to the board directly

(4.3.1.5) Frequency of reporting to the board on environmental issues

Select from:

☑ Annually

(4.3.1.6) Please explain

Chief Financial Officer is responsible for solving a complex of issues of the economic component of sustainable development, including issues of low carbon development.

Climate change

(4.3.1.1) Position of individual or committee with responsibility

Executive level

☑ Other C-Suite Officer, please specify :Deputy Chairman of the Management Board for Strategy, Investment and Business Development

(4.3.1.2) Environmental responsibilities of this position

Dependencies, impacts, risks and opportunities

☑ Assessing environmental dependencies, impacts, risks, and opportunities

☑ Managing environmental dependencies, impacts, risks, and opportunities

Engagement

☑ Managing public policy engagement related to environmental issues

☑ Managing value chain engagement related to environmental issues

Policies, commitments, and targets

☑ Measuring progress towards environmental corporate targets

☑ Setting corporate environmental targets

Strategy and financial planning

☑ Developing a climate transition plan

☑ Implementing a climate transition plan

☑ Conducting environmental scenario analysis

☑ Implementing the business strategy related to environmental issues

☑ Developing a business strategy which considers environmental issues

☑ Managing acquisitions, mergers, and divestitures related to environmental issues

☑ Managing priorities related to innovation/low-environmental impact products or services (including R&D)

(4.3.1.4) Reporting line

Select from:

☑ Other, please specify :Reports directly to the Chairman of the Management Board

(4.3.1.5) Frequency of reporting to the board on environmental issues

Select from:

☑ More frequently than quarterly

(4.3.1.6) Please explain

Deputy Chairman of the Management Board for Strategy, Investment and Business Development coordinates the development, implementation and monitoring of the implementation of the Low-carbon Development Program, energy efficiency and resource conservation in the KMG Group, In addition, the PP Deputy for Strategy, Investment and Business Development coordinates the issues of reducing the Company's carbon footprint and implementing low-carbon projects and initiatives.

Climate change

(4.3.1.1) Position of individual or committee with responsibility

Executive level

☑ Other C-Suite Officer, please specify :Deputy Chairman of the Management Board for Upstream Sector

(4.3.1.2) Environmental responsibilities of this position

Dependencies, impacts, risks and opportunities

☑ Assessing environmental dependencies, impacts, risks, and opportunities

☑ Managing environmental dependencies, impacts, risks, and opportunities

Engagement

☑ Managing public policy engagement related to environmental issues

☑ Managing value chain engagement related to environmental issues

Policies, commitments, and targets

☑ Measuring progress towards environmental corporate targets

☑ Setting corporate environmental targets

Strategy and financial planning

☑ Conducting environmental scenario analysis

☑ Developing a climate transition plan

☑ Implementing a climate transition plan

☑ Managing acquisitions, mergers, and divestitures related to environmental issues

☑ Managing priorities related to innovation/low-environmental impact products or services (including R&D)

(4.3.1.4) Reporting line

Select from:

☑ Other, please specify :Reports directly to the Chairman of the Management Board

(4.3.1.5) Frequency of reporting to the board on environmental issues

Select from:

☑ More frequently than quarterly

(4.3.1.6) Please explain

The Deputy Chairman of the Management Board for Upstream sector coordinates the implementation of the Low-carbon Development Program, energy efficiency and resource conservation in the KMG Group within the framework of supervised business processes.

Climate change

(4.3.1.1) Position of individual or committee with responsibility

Executive level

☑ Other C-Suite Officer, please specify :Deputy Chairman of the Management Board for Midstream Sector

(4.3.1.2) Environmental responsibilities of this position

Dependencies, impacts, risks and opportunities

☑ Assessing environmental dependencies, impacts, risks, and opportunities

☑ Managing environmental dependencies, impacts, risks, and opportunities

Engagement

☑ Managing public policy engagement related to environmental issues

☑ Managing value chain engagement related to environmental issues

Policies, commitments, and targets

☑ Measuring progress towards environmental corporate targets

☑ Setting corporate environmental policies and/or commitments

Strategy and financial planning

☑ Conducting environmental scenario analysis

☑ Developing a climate transition plan

☑ Implementing a climate transition plan

☑ Managing acquisitions, mergers, and divestitures related to environmental issues

☑ Managing priorities related to innovation/low-environmental impact products or services (including R&D)

(4.3.1.4) Reporting line

Select from:

☑ Other, please specify :Reports directly to the Chairman of the Management Board

(4.3.1.5) Frequency of reporting to the board on environmental issues

Select from:

☑ More frequently than quarterly

(4.3.1.6) Please explain

The Deputy Chairman of the Management Board for Midstream sector coordinates the implementation of the Low-carbon Development Program, energy efficiency and resource conservation in the KMG Group within the framework of supervised business processes.

Climate change

(4.3.1.1) Position of individual or committee with responsibility

Executive level

☑ Other C-Suite Officer, please specify :Deputy Chairman of the Management Board for Downstream Sector

(4.3.1.2) Environmental responsibilities of this position

Dependencies, impacts, risks and opportunities

☑ Assessing environmental dependencies, impacts, risks, and opportunities

☑ Managing environmental dependencies, impacts, risks, and opportunities

Engagement

☑ Managing public policy engagement related to environmental issues

☑ Managing value chain engagement related to environmental issues

Policies, commitments, and targets

☑ Measuring progress towards environmental corporate targets

☑ Setting corporate environmental targets

Strategy and financial planning

☑ Conducting environmental scenario analysis

☑ Developing a climate transition plan

☑ Implementing a climate transition plan

☑ Managing acquisitions, mergers, and divestitures related to environmental issues

(4.3.1.4) Reporting line

Select from:

☑ Other, please specify :Reports directly to the Chairman of the Management Board

(4.3.1.5) Frequency of reporting to the board on environmental issues

Select from:

☑ More frequently than quarterly

(4.3.1.6) Please explain

The Deputy Chairman of the Management Board for Downstream sector coordinates the implementation of the Low-carbon Development Program, energy efficiency and resource conservation in the KMG Group within the framework of supervised business processes.

Climate change

(4.3.1.1) Position of individual or committee with responsibility

Executive level

☑ Other C-Suite Officer, please specify :Deputy Chairman of the Management Board for the Gas Projects and low-carbon development area

(4.3.1.2) Environmental responsibilities of this position

Dependencies, impacts, risks and opportunities

☑ Assessing environmental dependencies, impacts, risks, and opportunities

☑ Managing environmental dependencies, impacts, risks, and opportunities

Engagement

☑ Managing public policy engagement related to environmental issues

☑ Managing value chain engagement related to environmental issues

Policies, commitments, and targets

☑ Measuring progress towards environmental corporate targets

☑ Setting corporate environmental targets

Strategy and financial planning

☑ Developing a climate transition plan

☑ Implementing a climate transition plan

☑ Conducting environmental scenario analysis

☑ Implementing the business strategy related to environmental issues

☑ Managing acquisitions, mergers, and divestitures related to environmental issues

☑ Managing priorities related to innovation/low-environmental impact products or services (including R&D)

(4.3.1.4) Reporting line

Select from:

☑ Other, please specify :Reports directly to the Chairman of the Management Board

(4.3.1.5) Frequency of reporting to the board on environmental issues

Select from:

☑ More frequently than quarterly

(4.3.1.6) Please explain

Deputy Chairman of the Management Board for the Gas Projects and low-carbon development area coordinates the development, implementation and monitoring of the implementation of the Low-carbon Development Program, energy efficiency and resource conservation in the KMG Group, In addition, the PP Deputy for the Gas Projects and low-carbon development area coordinates the issues of reducing the Company's carbon footprint and implementing low-carbon projects and initiatives.

Climate change

(4.3.1.1) Position of individual or committee with responsibility

Committee

☑ Other committee, please specify :Health, Safety, Environment and Sustainable Development Committee

(4.3.1.2) Environmental responsibilities of this position

Dependencies, impacts, risks and opportunities

☑ Assessing environmental dependencies, impacts, risks, and opportunities

☑ Managing environmental dependencies, impacts, risks, and opportunities

Engagement

☑ Managing public policy engagement related to environmental issues

☑ Managing value chain engagement related to environmental issues

Policies, commitments, and targets

☑ Measuring progress towards environmental corporate targets

☑ Setting corporate environmental targets

Strategy and financial planning

☑ Developing a climate transition plan

☑ Implementing the business strategy related to environmental issues

(4.3.1.4) Reporting line

Select from:

☑ Reports to the board directly

(4.3.1.5) Frequency of reporting to the board on environmental issues

Select from:

☑ Annually

(4.3.1.6) Please explain

KMG's Board of Directors gives high priority to sustainability issues. During the reporting year, the Health, Safety, Environment and Sustainable Development Committee held 10 meetings and reviewed 55 issues related to integrating sustainability into KMG's business processes. It is worth noting separately that the Board of Directors' annual special meeting on sustainable development was held for in-depth analysis of the Company's ESG aspects. This meeting covered key aspects of the ESG Plan, implementation of TCFD recommendations, and analysis of the current status and progress of our Low-Carbon Initiatives. In accordance with the Regulations on the Committee on Safety, Labor Protection, Environment and Sustainable Development of the Board of Directors of JSC NC "KazMunayGas" (approved by the decision of the Board of Directors dated 12.12.2018, Procedure No. 19/2018,), the Committee reviews and organizes issues of sustainable development, prepares recommendations for the approval of the policy in the field of sustainable development, the annual Report on the sustainable development of KMG, action plans and other internal documents in the field of sustainable development, the approval of which falls within the competence of the Board of Directors, the introduction of social, economic and environmental components of sustainable development, formation of a management system in the field of sustainable development, definition of goals and efficiency in the field of sustainable development, control over the implementation of sustainable development in KMG, integration of sustainable development into key processes of KMG.

Climate change

(4.3.1.1) Position of individual or committee with responsibility

Committee

☑ Risk committee

(4.3.1.2) Environmental responsibilities of this position

Dependencies, impacts, risks and opportunities

☑ Assessing environmental dependencies, impacts, risks, and opportunities

☑ Assessing future trends in environmental dependencies, impacts, risks, and opportunities

☑ Managing environmental dependencies, impacts, risks, and opportunities

(4.3.1.4) Reporting line

Select from:

☑ Other, please specify :reports to the Board Management

(4.3.1.5) Frequency of reporting to the board on environmental issues

Select from:

☑ Quarterly

(4.3.1.6) Please explain

According to the Regulations on the Risk Committee of JSC NC "KazMunayGas", the Committee carries out: - development of processes designed to identify, assess, monitor and control the risks of the KMG Group of Companies; - coordination of the risk management process for the KMG Group of companies; - preparation of recommendations and proposals for the organization and maintenance of an effective Corporate risk management system and Internal Control Service.

Water

(4.3.1.1) Position of individual or committee with responsibility

Executive level

☑ Chief Financial Officer (CFO)

(4.3.1.2) Environmental responsibilities of this position

Dependencies, impacts, risks and opportunities

☑ Assessing environmental dependencies, impacts, risks, and opportunities

☑ Managing environmental dependencies, impacts, risks, and opportunities

(4.3.1.4) Reporting line

Select from:

☑ Other, please specify :reports to the Board Management

(4.3.1.5) Frequency of reporting to the board on environmental issues

Select from:

☑ Annually

(4.3.1.6) Please explain

The Deputy Chairman of the Management Board for Economics and Finance is responsible for resolving a set of issues related to the economic component of KMG's sustainable development. The above persons are accountable to the Chairman of the Management Board of KMG. The accountability of those responsible for resolving economic, environmental and social issues is regulated in detail by internal regulations, internal control procedures and the continuity of the Company. So, on a regular basis, in accordance with development plans, issues are submitted for consideration by the Management Board, which in turn is accountable to the BoD.

Biodiversity

(4.3.1.1) Position of individual or committee with responsibility

Executive level

☑ Chief Financial Officer (CFO)

(4.3.1.2) Environmental responsibilities of this position

Dependencies, impacts, risks and opportunities

☑ Assessing environmental dependencies, impacts, risks, and opportunities

(4.3.1.4) Reporting line

Select from:

☑ Other, please specify :not required

(4.3.1.5) Frequency of reporting to the board on environmental issues

Select from:

☑ Not reported to the board

(4.3.1.6) Please explain

In 2025, it is planned to develop a Biodiversity Conservation Program. Responsibilities will be defined after the Biodiversity Conservation Programs have been developed.

Water

(4.3.1.1) Position of individual or committee with responsibility

Executive level

☑ Chief Sustainability Officer (CSO)

(4.3.1.2) Environmental responsibilities of this position

Dependencies, impacts, risks and opportunities

☑ Assessing environmental dependencies, impacts, risks, and opportunities

☑ Managing environmental dependencies, impacts, risks, and opportunities

(4.3.1.4) Reporting line

Select from:

☑ Reports to the board directly

(4.3.1.5) Frequency of reporting to the board on environmental issues

Select from:

☑ Annually

(4.3.1.6) Please explain

Deputy Chairman of the Management Board for Strategy, Investments and Business Development: Issues related to the creation and implementation of a sustainability management system to ensure compliance with sustainability principles, as well as integration of sustainability into the Company's key processes, development strategy and decision-making processes.

Biodiversity

(4.3.1.1) Position of individual or committee with responsibility

Executive level

☑ Chief Sustainability Officer (CSO)

(4.3.1.2) Environmental responsibilities of this position

Dependencies, impacts, risks and opportunities

☑ Assessing environmental dependencies, impacts, risks, and opportunities

(4.3.1.4) Reporting line

Select from:

☑ Other, please specify :not required

(4.3.1.5) Frequency of reporting to the board on environmental issues

Select from:

☑ Not reported to the board

(4.3.1.6) Please explain

In 2025, it is planned to develop a Biodiversity Conservation Program. Responsibilities will be defined after the Biodiversity Conservation Programs have been developed.

Water

(4.3.1.1) Position of individual or committee with responsibility

Executive level

☑ Other C-Suite Officer, please specify :Board of Directors

(4.3.1.2) Environmental responsibilities of this position

Dependencies, impacts, risks and opportunities

☑ Assessing environmental dependencies, impacts, risks, and opportunities

☑ Managing environmental dependencies, impacts, risks, and opportunities

(4.3.1.4) Reporting line

Select from:

☑ Reports to the board directly

(4.3.1.5) Frequency of reporting to the board on environmental issues

Select from:

☑ Annually

(4.3.1.6) Please explain

The Board of Directors (BoD) and the Management Board, within their competencies, ensure the formation of an appropriate system in the field of sustainable development and its implementation, while officials and all employees at all levels contribute to sustainable development, including water management.

Biodiversity

(4.3.1.1) Position of individual or committee with responsibility

Executive level

☑ Other C-Suite Officer, please specify :Board of Directors

(4.3.1.2) Environmental responsibilities of this position

Dependencies, impacts, risks and opportunities

☑ Assessing environmental dependencies, impacts, risks, and opportunities

(4.3.1.4) Reporting line

Select from:

☑ Other, please specify :not required

(4.3.1.5) Frequency of reporting to the board on environmental issues

Select from:

☑ Not reported to the board

(4.3.1.6) Please explain

In 2025, it is planned to develop a Biodiversity Conservation Program. Responsibilities will be defined after the Biodiversity Conservation Programs have been developed.

Water

(4.3.1.1) Position of individual or committee with responsibility

Committee

☑ Environmental, Social, Governance committee

(4.3.1.2) Environmental responsibilities of this position

Dependencies, impacts, risks and opportunities

☑ Assessing environmental dependencies, impacts, risks, and opportunities

☑ Managing environmental dependencies, impacts, risks, and opportunities

(4.3.1.4) Reporting line

Select from:

☑ Reports to the board directly

(4.3.1.5) Frequency of reporting to the board on environmental issues

Select from:

☑ Annually

(4.3.1.6) Please explain

In 2023, the Committee was mainly focused on health, safety and environment, strategic management of the ESG (Environmental – Social – Governance) aspects, and implementation of a sustainable development system. The key issues on the Committee's agenda in 2023 are as follows: " Health, safety and environment reports " Status of implementation of KMG's 2022–2031 Low-Carbon Development Programme " KMG's ESG (Environmental – Social – Governance) rating " Approval of the Action Plan to Improve KMG's ESG Rating " Status report on the implementation of the sustainable development system at KMG and its business units and incorporation of sustainable development principles into key business processes " KMG's contribution to the sustainable development goals " Results of the work on the Project Development of KMG's Action Plan to Improve Corporate Governance for Climate Transition and Disclosures in accordance with TCFD recommendations Moreover, the Committee reviewed and approved the 2022 Sustainability Report of KMG in 2023.

Water

(4.3.1.1) Position of individual or committee with responsibility

Executive level

☑ Other C-Suite Officer, please specify :Environmental, health, and safety director

(4.3.1.2) Environmental responsibilities of this position

Dependencies, impacts, risks and opportunities

☑ Assessing environmental dependencies, impacts, risks, and opportunities

☑ Managing environmental dependencies, impacts, risks, and opportunities

(4.3.1.4) Reporting line

Select from:

☑ Reports to the board directly

(4.3.1.5) Frequency of reporting to the board on environmental issues

Select from:

☑ More frequently than quarterly

(4.3.1.6) Please explain

The HSE service is responsible for: - the implementation and observance in the Company of the principles of rational management of water resources (8 "water principles"), for the collection of information on the use of water resources by the Company (except for information provided by other structural divisions), for the development of the Plan for the rational management of water resources, its implementation and analysis of the Company's activities in the field of water resources management. - carrying out inspections of facilities for compliance with the requirements of the legislation of the Republic of Kazakhstan and the Corporate Standard for water resources management, KMG's internal regulatory documents; - interaction with the authorized body, with other state regulatory bodies on water resources management, as well as with the responsible structural unit of KMG: - development and approval of the Water Resources Management Program

Water

(4.3.1.1) Position of individual or committee with responsibility

Executive level

☑ Other C-Suite Officer, please specify :Facilities manager

(4.3.1.2) Environmental responsibilities of this position

Dependencies, impacts, risks and opportunities

☑ Assessing environmental dependencies, impacts, risks, and opportunities

☑ Managing environmental dependencies, impacts, risks, and opportunities

(4.3.1.4) Reporting line

Select from:

☑ Reports to the board directly

(4.3.1.5) Frequency of reporting to the board on environmental issues

Select from:

☑ Quarterly

(4.3.1.6) Please explain

Chief executive officer of subsidiaries and affiliates is responsible for: - assistance in the implementation of all the principles specified in this Standard; - provision of the necessary resources (financial, material and human) to fulfill the provisions of the Standard. Heads of the production structural divisions of the Companies are responsible for: - regular inventory of water intake and water disposal metering devices, as well as for the completeness, reliability and timeliness of information on production structural divisions, collected / updated in accordance with the requirements of the Corporate Water Management Standard. Also, the Heads of subsidiaries, whose total annual water intake is more than 1 million cubic meters of water and companies that have their own treatment facilities and / or wastewater receivers, are responsible for developing Plans for the rational management of water resources for a 5-year period. The structural production units of the Company are responsible for: - for obtaining the necessary permits for special water use when withdrawing and / or using groundwater with withdrawal limits from fifty cubic meters per day and during intake and / or use of surface water applying stationary, mobile and / or floating structures for mechanical and gravity water intake from surface and sea waters; - for interaction with the HSE Service in terms of providing information in accordance with the requirements of the Corporate Standard for Water Resources Management.
[Add row]

(4.5) Do you provide monetary incentives for the management of environmental issues, including the attainment of targets?

Climate change

(4.5.1) Provision of monetary incentives related to this environmental issue

Select from:

☑ Yes

(4.5.2) % of total C-suite and board-level monetary incentives linked to the management of this environmental issue

0

(4.5.3) Please explain

On the date we uploaded the questionnaire, the company did not pay the bonuses to the Management Board members for their KPI on the low-carbon development program for 2024. This is the same situation for all other key performance indicators (KPIs) due to internal procedures.

Water

(4.5.1) Provision of monetary incentives related to this environmental issue

Select from:

☑ No, but we plan to introduce them in the next two years

(4.5.3) Please explain

The approval of the water resources management program for the KMG Group in KZ and its further implementation will be included in the management efficiency plan starting from 2025. Targets are established within KMG International, particularly for industrial sites. Even the Rompetrol sites are not located in high water stress area, the Petromidia Refinery aims to significantly reduce water intake (by 4% in 2025 and by up to 20% by 2040). At the moment, for the Rompetrol energy SA (not located in an area with high water stress) has established water comsumption targers to decrease the freshwater withdrawal by -5% in 2025, -2% in 2025, -2% in 2030, -2% in 2040 and -2% in 20205 from 2022. Waster discharge target -3% in 2024, -2% 2025, -2% 2030, -2% in 2040, -2% in 2050 from 2022. The targets presented are voluntary and are part of the company's sustainability strategy to reduce environmental impact and improve operational ifficiency.
[Fixed row]

(4.5.1) Provide further details on the monetary incentives provided for the management of environmental issues (do not include the names of individuals).

Climate change

(4.5.1.1) Position entitled to monetary incentive

Board or executive level

☑ Director on board

(4.5.1.2) Incentives

Select all that apply

☑ Bonus - % of salary

(4.5.1.3) Performance metrics

Targets

☑ Progress towards environmental targets

☑ Achievement of environmental targets

Strategy and financial planning

☑ Achievement of climate transition plan

☑ Increased investment in environmental R&D and innovation

☑ Increased proportion of revenue from low environmental impact products or services

Emission reduction

☑ Implementation of an emissions reduction initiative

☑ Reduction in emissions intensity

☑ Increased share of renewable energy in total energy consumption

☑ Reduction in absolute emissions

Resource use and efficiency

☑ Energy efficiency improvement

☑ Reduction in total energy consumption

Engagement

☑ Implementation of employee awareness campaign or training program on environmental issues

☑ Other engagement-related metrics, please specify :Implementation of employee awareness campaign or training program on climate- related issues

(4.5.1.4) Incentive plan the incentives are linked to

Select from:

☑ Both Short-Term and Long-Term Incentive Plan, or equivalent

(4.5.1.5) Further details of incentives

In order to enhance motivation for implementing corporate and functional efficiency at KMG, the Deputy Chairmen of the Management Board have a Key Performance Indicator (KPI) on climate issues for which they are provided with a monetary incentive.

(4.5.1.6) How the position's incentives contribute to the achievement of your environmental commitments and/or climate transition plan

The company operates a motivation system based on KPIs. Target indicators, threshold and challenge levels are established, and the form of completion is defined. Throughout the year, KPI performance is monitored. For example, for the KPI Implementation of the Action Plan for the Realization of the LCDP KMG, the execution of each activity in the Plan is tracked. Meetings with subsidiaries are held, reports are collected, and selective inspections are conducted during visits to subsidiaries. The goal is 100% implementation. Additionally, KPI performance is audited by the Internal Audit Department of KMG. On the date we uploaded the questionnaire, the company did not pay the bonuses to the Management Board members for their work on the low-carbon development program for 2024. This is the same situation for all other key performance indicators (KPIs) due to internal procedures.
[Add row]

(4.6) Does your organization have an environmental policy that addresses environmental issues?

	Does your organization have any environmental policies?
	Select from: ☑ Yes

[Fixed row]

(4.6.1) Provide details of your environmental policies.

Row 1

(4.6.1.1) Environmental issues covered

Select all that apply
☑ Climate change

(4.6.1.2) Level of coverage

Select from:

☑ Organization-wide

(4.6.1.3) Value chain stages covered

Select all that apply

☑ Direct operations

☑ Upstream value chain

☑ Downstream value chain

(4.6.1.4) Explain the coverage

Environmental Policy

(4.6.1.5) Environmental policy content

Environmental commitments

☑ Commitment to comply with regulations and mandatory standards

☑ Commitment to take environmental action beyond regulatory compliance

☑ Commitment to stakeholder engagement and capacity building on environmental issues

Climate-specific commitments

☑ Commitment to zero flaring

Additional references/Descriptions

☑ Description of environmental requirements for procurement

(4.6.1.6) Indicate whether your environmental policy is in line with global environmental treaties or policy goals

Select all that apply

☑ Yes, in line with the Paris Agreement

☑ Yes, in line with another global environmental treaty or policy goal, please specify :UN Sustanable Development Goals 13 Climate Action

(4.6.1.7) Public availability

Select from:

☑ Publicly available

(4.6.1.8) Attach the policy

KazMunayGas Environmental Policy (1).pdf

Row 2

(4.6.1.1) Environmental issues covered

Select all that apply

☑ Climate change

(4.6.1.2) Level of coverage

Select from:

☑ Organization-wide

(4.6.1.3) Value chain stages covered

Select all that apply

☑ Direct operations

☑ Upstream value chain

☑ Downstream value chain

(4.6.1.4) Explain the coverage

Low-Carbon Development Programme

(4.6.1.5) Environmental policy content

Climate-specific commitments

☑ Commitment to zero flaring

☑ Other climate-related commitment, please specify :15% reduction

Additional references/Descriptions

☑ Description of impacts on natural resources and ecosystems

☑ Description of environmental requirements for procurement

(4.6.1.6) Indicate whether your environmental policy is in line with global environmental treaties or policy goals

Select all that apply

☑ Yes, in line with the Paris Agreement

☑ Yes, in line with another global environmental treaty or policy goal, please specify :UN Sustanable Development Goals 13 Climate Action

(4.6.1.7) Public availability

Select from:

☑ Publicly available

(4.6.1.8) Attach the policy

LCDP_2060_ ENG -FINAL.pdf

Row 3

(4.6.1.1) Environmental issues covered

Select all that apply

☑ Water

(4.6.1.2) Level of coverage

Select from:

☑ Organization-wide

(4.6.1.3) Value chain stages covered

Select all that apply

☑ Direct operations

☑ Upstream value chain

☑ Downstream value chain

(4.6.1.4) Explain the coverage

The corporate standard for water resources management in the KMG group of companies is part of the KMG Group HSE Management System. The standard defines corporate principles for water resources management, regulates the activities of KMG Group, employees and contractors of KMG, as well as design organizations whose activities are related to the withdrawal and / or consumption of water resources, relocation, changes in their quality, aimed at minimizing the negative impact on the environment and ensuring environmental sustainability. The main objectives of the Standard are: - determination of key principles of water resources management, intended for mandatory use throughout the KMG Group; - ensuring continuous improvement in water management; - ensuring a unified process of water resources management in the Companies, as opposed to the established practice of uncoordinated management of water use by different divisions for various needs of the company (drinking, industrial, household and other needs); - ensuring the involvement of stakeholders in the process of water resources management in the Company.

(4.6.1.5) Environmental policy content

Water-specific commitments

☑ Commitment to reduce water consumption volumes

☑ Commitment to reduce water withdrawal volumes

☑ Commitment to control/reduce/eliminate water pollution

☑ Commitment to safely managed WASH in local communities

☑ Commitment to the conservation of freshwater ecosystems

☑ Commitment to water stewardship and/or collective action

(4.6.1.6) Indicate whether your environmental policy is in line with global environmental treaties or policy goals

Select all that apply

☑ Yes, in line with Sustainable Development Goal 6 on Clean Water and Sanitation

(4.6.1.7) Public availability

Select from:

☑ Publicly available

(4.6.1.8) Attach the policy

KMG Water Management Corporate Standard_Shortened.pdf

Row 4

(4.6.1.1) Environmental issues covered

Select all that apply

☑ Water

(4.6.1.2) Level of coverage

Select from:

☑ Organization-wide

(4.6.1.3) Value chain stages covered

Select all that apply

☑ Direct operations

☑ Upstream value chain

☑ Downstream value chain

(4.6.1.4) Explain the coverage

Water resources management in KMG is based on the following 8 “water” principles (8 "blue" rules): 1) recognition of the highest value of water for human life and health, for society and industrial activities, as well as the importance of a careful and rational attitude to the country's water resources. 2) compliance with the requirements of the legislation of the Republic of Kazakhstan, as well as compliance with international standards and best practices. 3) taking into account the issues of fresh water conservation and the efficiency of its use in making managerial decisions and in operations control. 4) assessment and accounting of the initial sources of water intake, regardless of whether water is taken directly or purchased through intermediaries. 5) the maximum cancellation of using potable water for production purposes. 6) 100% instrument metering of water intake and water discharge; 7) the maximum reduction of fresh water intake due to the introduction of water circulation and water-saving technologies, reduction of discharge volumes, by improving the quality of water treatment for maximum possible reuse. 8) Building capacity for sustainable water management through participation in industry associations and international water resource initiatives.

(4.6.1.5) Environmental policy content

Water-specific commitments

☑ Commitment to control/reduce/eliminate water pollution

☑ Commitment to reduce water consumption volumes

☑ Commitment to reduce water withdrawal volumes

☑ Commitment to safely managed WASH in local communities

☑ Commitment to the conservation of freshwater ecosystems

(4.6.1.6) Indicate whether your environmental policy is in line with global environmental treaties or policy goals

Select all that apply

☑ Yes, in line with Sustainable Development Goal 6 on Clean Water and Sanitation

(4.6.1.7) Public availability

Select from:

☑ Publicly available

(4.6.1.8) Attach the policy

8 (blue) rules.pdf

Row 5

(4.6.1.1) Environmental issues covered

Select all that apply

☑ Climate change

(4.6.1.2) Level of coverage

Select from:

☑ Organization-wide

(4.6.1.3) Value chain stages covered

Select all that apply

☑ Direct operations

☑ Upstream value chain

☑ Downstream value chain

(4.6.1.4) Explain the coverage

Sustainable Development Policy

(4.6.1.5) Environmental policy content

Environmental commitments

☑ Commitment to comply with regulations and mandatory standards

☑ Commitment to take environmental action beyond regulatory compliance

☑ Commitment to stakeholder engagement and capacity building on environmental issues

Climate-specific commitments

☑ Commitment to zero flaring

☑ Commitment to not funding climate-denial or lobbying against climate regulations

☑ Other climate-related commitment, please specify :Regular assessment of environmental risks, mitigation and prevention of risks of adverse environmental impact from operations; Ensuring that the Company's carbon footprint reduction goals are met; Ensuring an increase in the energy efficiency of core

Social commitments

☑ Adoption of the UN International Labour Organization principles

☑ Commitment to promote gender equality and women’s empowerment

(4.6.1.6) Indicate whether your environmental policy is in line with global environmental treaties or policy goals

Select all that apply

☑ Yes, in line with the Paris Agreement

☑ Yes, in line with Sustainable Development Goal 6 on Clean Water and Sanitation

☑ Yes, in line with another global environmental treaty or policy goal, please specify :UN Sustanable Development Goals 13 Climate Action

(4.6.1.7) Public availability

Select from:

☑ Publicly available

(4.6.1.8) Attach the policy

Sustainable Development Policy_2022.pdf
[Add row]

(4.10) Are you a signatory or member of any environmental collaborative frameworks or initiatives?

(4.10.1) Are you a signatory or member of any environmental collaborative frameworks or initiatives?

Select from:

☑ Yes

(4.10.2) Collaborative framework or initiative

Select all that apply

☑ UN Global Compact

☑ Other, please specify **:Global Methane Initiative, OGDC, OGMP, The World Bank Initiative "Zero Routine Flaring by 2030" International Association of Oil and Gas Producers (IOGP)**

☑ The Climate Pledge

☑ Science-Based Targets Initiative (SBTi)

☑ Global Reporting Initiative (GRI) Community Member

☑ Task Force on Climate-related Financial Disclosures (TCFD)

(4.10.3) Describe your organization's role within each framework or initiative

1) GRI - Since 2012, the Company has been preparing a Sustainability Report in accordance with international non-financial reporting standards developed by the Global Reporting Initiative (GRI). 2) SBTi - KMG employs the Science Based Targets initiative (SBTi) approach in the goal-setting process to ensure alignment with the latest climate science and the objectives of the Paris Agreement. Through SBTi, we are committed to reducing our greenhouse gas emissions in accordance with

what is necessary to limit global warming to well below 2°C above pre-industrial levels, and ideally to 1.5°C. 3) TCFD - With the support of the European Bank for Reconstruction and Development, within the framework of the memorandum of cooperation signed in June 2022, a project was launched in 2023 to introduce climate reporting in accordance with the recommendations of the TCFD. It is planned that the work will focus on stress testing of the Company's supply chains in various scenarios of climate change, determining the appropriate priorities for action in the field of climate change, including the assessment of financial materiality, the definition of appropriate evidence-based indicators and goals that lead to improved results of corporate actions in the field of climate change. In 2024, a risk assessment was also carried out taking into account the TCFD recommendations. 4) The Climate Pledge - In December 2023, on the margins of the Conference of Parties on Climate Change (COP28), Kazakhstan joined the Global Methane Initiative (The Global Methane Pledge). 5) UN Global Compact - A demonstration of our commitment to the principles of sustainable development is membership in the UN Global Compact, as well as the annual publication of the Sustainable Development Report on the UN State Duma website as a Message on the progress made by KMG in promoting the Principles of the Global Compact and the 17 Global Sustainable Development Goals Global Methane Initiative 6) GMI - Since 2017, KMG has been a member of the Global Methane Initiative project network. KMG supports the Global Methane Initiative (GMI) and regularly discloses information about its environmental activities to all interested parties to the parties within the framework of the Sustainable Development Report. 7) OGDC - As part of its participation in the Conference of Parties (COP-28), KMG became one of 52 oil and gas companies to join the Oil and Gas Decarbonisation Charter, a global industry initiative aimed at achieving high performance and accelerating climate action in the sector. The key goals of the Initiative are to achieve carbon neutrality by 2050, reduce routine gas flaring by 2030 and achieve near-zero methane emissions. 8) OGMP - Understanding the importance of reducing methane emissions into the atmosphere, KazMunayGas became the first Kazakh national company in 2023 to join the OGMP 2.0 Partnership organised by UNEP and IMEO on the margins of the COP28 Climate Change Conference. Thus, KazMunayGas signed a Memorandum of Understanding with UNEP as part of the COP28 conference. The Oil and Gas Methane Partnership 2.0 (OGMP 2.0) is the United Nations Environment Programme's flagship programme for reporting and reducing methane emissions from the oil and gas industry. OGMP 2 0 is the only comprehensive measurement-based reporting system for the oil and gas industry that improves the accuracy and transparency of methane emissions reporting. This is key to prioritising actions to reduce methane emissions in the industry. 9) The World Bank Initiative "Zero Routine Flaring by 2030" - The initiative brings together governments, oil companies and development organisations who agree to cooperate to stop the practice of routine flaring of associated petroleum gas (APG) by 2030 at the latest. KMG supported this initiative in 2015 and has set itself the goal of increasing the beneficial use of crude gas (APG) and reducing routine gas flaring to zero. 10) Since 2018, KMG has been a full member of the International Association of Oil and Gas Producers (IOGP). Over the years of its membership in IOGP, KMG has learnt and used international best IOGP recommendations and practices, which has helped to improve KMG's HSE performance and overall management system, as well as increased KMG's capabilities and rating at the international level. Starting from 2022, KMG has adopted the Life-Saving Rules, which replace the Gold Rules previously in force for the Group. IOGP has analysed two thousand fatal accidents in about one hundred IOGP member companies from 1991 to the present. As a result of the analyses, the association identified the most frequently recurring safety violations. To prevent these violations, 9 Life-Saving Rules have been developed. These rules inform workers of actions they can take to protect themselves and their co workers from fatalities.
[Fixed row]

(4.11) In the reporting year, did your organization engage in activities that could directly or indirectly influence policy, law, or regulation that may (positively or negatively) impact the environment?

(4.11.1) External engagement activities that could directly or indirectly influence policy, law, or regulation that may impact the environment

Select all that apply

☑ Yes, we engaged indirectly through, and/or provided financial or in-kind support to a trade association or other intermediary organization or individual whose activities could influence policy, law, or regulation

(4.11.2) Indicate whether your organization has a public commitment or position statement to conduct your engagement activities in line with global environmental treaties or policy goals

Select from:

☑ Yes, we have a public commitment or position statement in line with global environmental treaties or policy goals

(4.11.3) Global environmental treaties or policy goals in line with public commitment or position statement

Select all that apply

☑ Paris Agreement

☑ Another global environmental treaty or policy goal, please specify :Global Methane Pledge

(4.11.4) Attach commitment or position statement

Sustainable Development Policy_2022.pdf

(4.11.5) Indicate whether your organization is registered on a transparency register

Select from:

☑ No

(4.11.8) Describe the process your organization has in place to ensure that your external engagement activities are consistent with your environmental commitments and/or transition plan

KMG has adopted a Sustainable Development Policy, which establishes that the Company's obligations set out in this Policy (in ESG aspects) apply to the Company, contractors, and are included in the system of business relations between the Company and its partners (see p.2 of attached document). At the same time, KMG has established a robust process to ensure that our external engagement activities align with our environmental commitments and transition plan. This process is designed to manage engagement activities across various business divisions and geographies, ensuring a unified approach consistent with our environmental strategy. In our sustainability framework, we have implemented a comprehensive stakeholder engagement system. This system ensures continuous and effective interaction with all stakeholders. Additionally, we have adopted the CPDD process. We conduct regular stakeholder mapping to identify and prioritize key stakeholders, including local communities, regulatory bodies, NGOs, and industry partners.
[Fixed row]

(4.11.2) Provide details of your indirect engagement on policy, law, or regulation that may (positively or negatively) impact the environment through trade associations or other intermediary organizations or individuals in the reporting year.

Row 1

(4.11.2.1) Type of indirect engagement

Select from:

☑ Indirect engagement via a trade association

(4.11.2.4) Trade association

Global

☑ International Association of Oil and Gas Producers (IOGP)

(4.11.2.5) Environmental issues relevant to the policies, laws, or regulations on which the organization or individual has taken a position

Select all that apply

☑ Climate change

☑ Water

(4.11.2.6) Indicate whether your organization's position is consistent with the organization or individual you engage with

Select from:

☑ Consistent

(4.11.2.7) Indicate whether your organization attempted to influence the organization or individual's position in the reporting year

Select from:

☑ No, we did not attempt to influence their position

(4.11.2.8) Describe how your organization's position is consistent with or differs from the organization or individual's position, and any actions taken to influence their position

OGP actively supports the enhancement of the industry's performance on minimising methane emissions from upstream oil and gas production, including flaring and venting. Since May 2018, IOGP has been a Supporting Organisation to the Methane Guiding Principles. Their Environmental Performance Indicators Report, which presents methane emissions per region, contributes to the improvement of accuracy and transparency. KMG use provided information for comparison with benchmarks on GHG emissions reductions. Over the years of membership in IOGP, KMG has studied and used international best practices and best practices of IOGP, which helped to improve the performance and overall management system of KMG in the field of Fire safety, occupational safety and the environment, as well as increased the capabilities and rating of KMG at the international level.

(4.11.2.9) Funding figure your organization provided to this organization or individual in the reporting year (currency)

23438

(4.11.2.10) Describe the aim of this funding and how it could influence policy, law or regulation that may impact the environment

We aim to study best energy transition practices among oil & gas companies to use in our strategy.

(4.11.2.11) Indicate if you have evaluated whether your organization's engagement is aligned with global environmental treaties or policy goals

Select from:

☑ Yes, we have evaluated, and it is aligned

(4.11.2.12) Global environmental treaties or policy goals aligned with your organization's engagement on policy, law or regulation

Select all that apply

☑ Paris Agreement

☑ Sustainable Development Goal 6 on Clean Water and Sanitation

☑ Another global environmental treaty or policy goal, please specify :Global Methane Pledge

Row 2

(4.11.2.1) Type of indirect engagement

Select from:

☑ Indirect engagement via a trade association

(4.11.2.4) Trade association

Asia and Pacific

☑ Other trade association in Asia and Pacific, please specify :The National Chamber of Entrepreneurs of the Republic of Kazakhstan "Atameken"

(4.11.2.5) Environmental issues relevant to the policies, laws, or regulations on which the organization or individual has taken a position

Select all that apply

☑ Climate change

☑ Water

(4.11.2.6) Indicate whether your organization’s position is consistent with the organization or individual you engage with

Select from:

☑ Consistent

(4.11.2.7) Indicate whether your organization attempted to influence the organization or individual’s position in the reporting year

Select from:

☑ No, we did not attempt to influence their position

(4.11.2.8) Describe how your organization’s position is consistent with or differs from the organization or individual’s position, and any actions taken to influence their position

Membership in the National Chamber of Entrepreneurs of the Republic of Kazakhstan "Atameken" in accordance with the Law of the Republic of Kazakhstan "On the National Chamber of Entrepreneurs of the Republic of Kazakhstan" is mandatory for all Kazakh business entities. At the same time, the National Chamber of Entrepreneurs of the Republic of Kazakhstan "Atameken" is bound to represent the position of its members, including KMG.

(4.11.2.9) Funding figure your organization provided to this organization or individual in the reporting year (currency)

6800

(4.11.2.10) Describe the aim of this funding and how it could influence policy, law or regulation that may impact the environment

Membership fees are mandatory in accordance with the Law of the Republic of Kazakhstan "On the National Chamber of Entrepreneurs of the Republic of Kazakhstan"

(4.11.2.11) Indicate if you have evaluated whether your organization’s engagement is aligned with global environmental treaties or policy goals

Select from:

☑ Yes, we have evaluated, and it is aligned

(4.11.2.12) Global environmental treaties or policy goals aligned with your organization’s engagement on policy, law or regulation

Select all that apply

☑ Paris Agreement

☑ Sustainable Development Goal 6 on Clean Water and Sanitation

☑ Another global environmental treaty or policy goal, please specify :Global Methane Pledge

Row 3

(4.11.2.1) Type of indirect engagement

Select from:

☑ Indirect engagement via a trade association

(4.11.2.4) Trade association

Asia and Pacific

☑ Other trade association in Asia and Pacific, please specify :ASSOCIATION OF LEGAL ENTITIES “KAZAKHSTAN ASSOCIATION OF OIL-GAS AND ENERGY SECTOR ORGANIZATIONS “KAZENERGY”

(4.11.2.5) Environmental issues relevant to the policies, laws, or regulations on which the organization or individual has taken a position

Select all that apply

☑ Climate change

☑ Water

(4.11.2.6) Indicate whether your organization’s position is consistent with the organization or individual you engage with

Select from:

☑ Consistent

(4.11.2.7) Indicate whether your organization attempted to influence the organization or individual’s position in the reporting year

Select from:

☑ No, we did not attempt to influence their position

(4.11.2.8) Describe how your organization’s position is consistent with or differs from the organization or individual’s position, and any actions taken to influence their position

KAZENERGY Association unites more than 80 major oil & gas and energy sector companies of Kazakhstan. Closely interacting with state bodies, business representatives and public structures, it promotes sustainable development of the oil & gas and energy complexes of the Republic of Kazakhstan.

(4.11.2.9) Funding figure your organization provided to this organization or individual in the reporting year (currency)

34000

(4.11.2.10) Describe the aim of this funding and how it could influence policy, law or regulation that may impact the environment

Keeping KMG informed of legislative changes in progress and representing KMG's position in the dialogue with state bodies

(4.11.2.11) Indicate if you have evaluated whether your organization’s engagement is aligned with global environmental treaties or policy goals

Select from:

☑ Yes, we have evaluated, and it is aligned

(4.11.2.12) Global environmental treaties or policy goals aligned with your organization’s engagement on policy, law or regulation

Select all that apply

☑ Paris Agreement

☑ Sustainable Development Goal 6 on Clean Water and Sanitation

☑ Another global environmental treaty or policy goal, please specify :Global Methane Pledge

Row 4

(4.11.2.1) Type of indirect engagement

Select from:

☑ Indirect engagement via a trade association

(4.11.2.4) Trade association

Asia and Pacific

☑ Other trade association in Asia and Pacific, please specify :Association of Legal Entities «RES Association «Qazaq Green»

(4.11.2.5) Environmental issues relevant to the policies, laws, or regulations on which the organization or individual has taken a position

Select all that apply

☑ Climate change

(4.11.2.6) Indicate whether your organization's position is consistent with the organization or individual you engage with

Select from:

☑ Consistent

(4.11.2.7) Indicate whether your organization attempted to influence the organization or individual's position in the reporting year

Select from:

☑ No, we did not attempt to influence their position

(4.11.2.8) Describe how your organization's position is consistent with or differs from the organization or individual's position, and any actions taken to influence their position

Association is a non-profit organisation, promoting renewable energy in Kazakhstan and uniting investors, developers, equipment manufacturers, international financial institutions and universities. The Qazaq Green Association provides KMG qualified support on the implementation of RES projects, promotion our interests, obtaining up- todate information on Kazakhstan RES legal framework, making proposals to government bodies in order to update current regulation, as well as obtaining information and analytical support. Association is accredited by the Ministry of Energy of the Republic of Kazakhstan, the Ministry of Ecology, Geology and Natural Resources of the Republic of Kazakhstan, National Chamber of Entrepreneurs of the Republic of Kazakhstan 'Atameken' and considered as one of the key expert centers for renewable energy development in Kazakhstan for both government agencies and the business community.

(4.11.2.9) Funding figure your organization provided to this organization or individual in the reporting year (currency)

7500

(4.11.2.10) Describe the aim of this funding and how it could influence policy, law or regulation that may impact the environment

Association is a non-profit organisation, promoting renewable energy in Kazakhstan and uniting investors, developers, equipment manufacturers, international financial institutions and universities. The Qazaq Green Association provides KMG qualified support on the implementation of RES projects, promotion our interests, obtaining up- todate information on Kazakhstan RES legal framework, making proposals to government bodies in order to update current regulation, as well as obtaining information and analytical support. Association is accredited by the Ministry of Energy of the Republic of Kazakhstan, the Ministry of Ecology, Geology and Natural Resources of the Republic of Kazakhstan, National Chamber of Entrepreneurs of the Republic of Kazakhstan 'Atameken' and considered as one of the key expert centers for renewable energy development in Kazakhstan for both government agencies and the business community.

(4.11.2.11) Indicate if you have evaluated whether your organization’s engagement is aligned with global environmental treaties or policy goals

Select from:

☑ Yes, we have evaluated, and it is aligned

(4.11.2.12) Global environmental treaties or policy goals aligned with your organization’s engagement on policy, law or regulation

Select all that apply

☑ Paris Agreement

☑ Another global environmental treaty or policy goal, please specify :Global Methane Pledge

Row 5

(4.11.2.1) Type of indirect engagement

Select from:

☑ Indirect engagement via a trade association

(4.11.2.4) Trade association

Asia and Pacific

☑ Other trade association in Asia and Pacific, please specify :Kazakhstan Association of Regional Environmental Initiatives "Ecojer"

(4.11.2.5) Environmental issues relevant to the policies, laws, or regulations on which the organization or individual has taken a position

Select all that apply

☑ Climate change

(4.11.2.6) Indicate whether your organization's position is consistent with the organization or individual you engage with

Select from:

☑ Consistent

(4.11.2.7) Indicate whether your organization attempted to influence the organization or individual's position in the reporting year

Select from:

☑ No, we did not attempt to influence their position

(4.11.2.8) Describe how your organization's position is consistent with or differs from the organization or individual's position, and any actions taken to influence their position

KMG Group of Companies joined to the Kazakhstan Association of Regional Environmental Initiatives "Ecojer" in 2021. The purpose of the Association is to consolidate the business community and civil society to protect common interests in the field of environmental protection. The Association strives to achieve a balance between the directions of state policy, the interests of the public and the needs of economic development.

(4.11.2.9) Funding figure your organization provided to this organization or individual in the reporting year (currency)

10650

(4.11.2.10) Describe the aim of this funding and how it could influence policy, law or regulation that may impact the environment

Keeping KMG informed of legislative changes in progress of environmental protection activities – taking into account a balanced approach between the directions of state policy, the interested public and the need to develop economic potential.

(4.11.2.11) Indicate if you have evaluated whether your organization's engagement is aligned with global environmental treaties or policy goals

Select from:

☑ Yes, we have evaluated, and it is aligned

(4.11.2.12) Global environmental treaties or policy goals aligned with your organization's engagement on policy, law or regulation

Select all that apply

☑ Paris Agreement

☑ Another global environmental treaty or policy goal, please specify :Global Methane Pledge

[Add row]

(4.12) Have you published information about your organization's response to environmental issues for this reporting year in places other than your CDP response?

Select from:

☑ Yes

(4.12.1) Provide details on the information published about your organization's response to environmental issues for this reporting year in places other than your CDP response. Please attach the publication.

Row 1

(4.12.1.1) Publication

Select from:

☑ In voluntary sustainability reports

(4.12.1.3) Environmental issues covered in publication

Select all that apply

☑ Climate change

☑ Water

☑ Biodiversity

(4.12.1.4) Status of the publication

Select from:

☑ Complete

(4.12.1.5) Content elements

Select all that apply

☑ Strategy

☑ Governance

☑ Emission targets

☑ Emissions figures

☑ Risks & Opportunities

☑ Water pollution indicators

☑ Content of environmental policies

☑ Value chain engagement

☑ Dependencies & Impacts

☑ Biodiversity indicators

☑ Public policy engagement

☑ Water accounting figures

(4.12.1.6) Page/section reference

KMG Sustainable Development Report for 2024: pp. 22-23 Production Value Chain pp. 65-69 ESG Risks management pp.86-101 - Low-Carbon development in the Company pp.102-129 - Environmental protection

(4.12.1.7) Attach the relevant publication

(4.12.1.8) Comment

Since 2012, the Company has been preparing a Sustainability Report in accordance with international non-financial reporting standards developed by the Global Reporting Initiative (GRI). At the same time, KMG follows TCFD, S1, S2 standards.

Row 2

(4.12.1.1) Publication

Select from:

☑ Other, please specify :Low-Carbon Development Program of JSC NC KazMunayGas till 2060

(4.12.1.3) Environmental issues covered in publication

Select all that apply

☑ Climate change

(4.12.1.4) Status of the publication

Select from:

☑ Complete

(4.12.1.5) Content elements

Select all that apply

☑ Governance

☑ Risks & Opportunities

☑ Strategy

☑ Emissions figures

☑ Emission targets

(4.12.1.6) Page/section reference

KMG Low-Carbon Development Program until 2060: pp. 7-11 - Strategy, pp. 12-14 Risks and Opportunities, pp.23-25 low-carbon scenario modelling, pp. 27-28 emission targets, pp. 17-18 GHG emission inventory, pp. 38-47 Governance

(4.12.1.7) Attach the relevant publication

LCDP_2060_ ENG -FINAL.pdf

(4.12.1.8) Comment

In order to ensure a systematic approach to the climate change strategy, KMG has developed and approved the Low-Carbon Development Program until 2060, which defines a unified framework for the Company's decarbonization as an integral component of corporate governance. The main objective of the Program is to define KMG's climate ambitions, systematize the main approaches and measures to reduce the carbon footprint, including, in particular: (i) Analysis of the existing potential and definition of KMG's climate goals; (ii) Definition of key areas for the development of the company's decarbonization and measures to achieve the set goals; (iii) Capacity development and awareness raising. In order to determine specific measures to achieve the targets in 2024, an Action Plan for the implementation of the Program has been developed. Low-carbon development issues are included in the Development Strategy of JSC NC KazMunayGas for 2022–2031 (Strategic Goal 4 "Sustainable Development and Phased Reduction of Carbon Intensity of Production"), and are also reflected in the key performance indicators of the members of the Management Board and subsidiaries and affiliates covered by the Program.

Row 3

(4.12.1.1) Publication

Select from:

☑ In mainstream reports, in line with environmental disclosure standards or frameworks

(4.12.1.2) Standard or framework the report is in line with

Select all that apply

☑ GRI

☑ IFRS

☑ TCFD

(4.12.1.3) Environmental issues covered in publication

Select all that apply

☑ Climate change

(4.12.1.4) Status of the publication

Select from:

☑ Complete

(4.12.1.5) Content elements

Select all that apply

☑ Strategy

☑ Governance

☑ Emission targets

☑ Emissions figures

☑ Risks & Opportunities

☑ Dependencies & Impacts

☑ Content of environmental policies

(4.12.1.6) Page/section reference

KMG Annual Report for 2024: p.28 Strategy p. 118 - KMG's principles of sustainability management p. 122-131 Comprehensive approach to ensuring KMG's sustainable development p. 119 ESG risk rating p. 121 Commitment to UN Global Compact principles and 17 Sustainable Development Goals, p. 134 Low- Carbon Development Programme p. 145 - TCFD-aligned disclosure

(4.12.1.7) Attach the relevant publication

KazMunayGas_AR2024_ENG.pdf

(4.12.1.8) Comment

The Report of JSC National Company KazMunayGas for 2024 includes the performance results of the parent company and its subsidiaries and associates, referred to as JSC NC KazMunayGas (KMG, the Company, KMG Group), which are compiled using the principles of the KMG consolidated financial statements prepared under International Financial Reporting Standards (IFRS). The report exceeds the size of 50 MB, please read the report on the KMG website https://www.kmg.kz/upload/iblock/de8/4fttfvhjch55j5doi6k97t7sy0s3r40us/KazMunayGas_AR2024_RUS_1906.pdf
[Add row]

C5. Business strategy

(5.1) Does your organization use scenario analysis to identify environmental outcomes?

Climate change

(5.1.1) Use of scenario analysis

Select from:

☑ Yes

(5.1.2) Frequency of analysis

Select from:

☑ Every three years or less frequently

Water

(5.1.1) Use of scenario analysis

Select from:

☑ Yes

(5.1.2) Frequency of analysis

Select from:

☑ Every three years or less frequently

[Fixed row]

(5.1.1) Provide details of the scenarios used in your organization’s scenario analysis.

Climate change

(5.1.1.1) Scenario used

Climate transition scenarios

☑ Bespoke climate transition scenario

(5.1.1.3) Approach to scenario

Select from:

☑ Qualitative and quantitative

(5.1.1.4) Scenario coverage

Select from:

☑ Organization-wide

(5.1.1.5) Risk types considered in scenario

Select all that apply

☑ Policy

☑ Market

☑ Liability

☑ Reputation

☑ Technology

☑ Acute physical

☑ Chronic physical

(5.1.1.6) Temperature alignment of scenario

Select from:

☑ 1.5°C or lower

(5.1.1.7) Reference year

2019

(5.1.1.8) Timeframes covered

Select all that apply

☑ 2060

(5.1.1.9) Driving forces in scenario

Local ecosystem asset interactions, dependencies and impacts

☑ Climate change (one of five drivers of nature change)

(5.1.1.10) Assumptions, uncertainties and constraints in scenario

Policies in the jurisdictions covered by the scenario: Potential changes in legislation could alter the regulatory landscape, impacting the stringency and enforcement of policies. Macroeconomic trends: Economic downturns or global financial crises could reduce available funding for low-carbon initiatives. National- or regional-level variables: Increased frequency and severity of extreme weather events could disrupt operations and supply chains. Limited availability of natural resources in certain regions may affect production capacities. Developments in technology: Technological breakthroughs may not occur as expected, delaying the transition to low-carbon solutions. High initial costs and long development timelines for new technologies. Energy usage and mix: Fluctuations in energy prices and availability of renewable energy sources. Existing infrastructure may not support the rapid integration of renewable energy. Driving forces in scenario: The actual intensity of climate change impacts may vary, affecting the urgency and scale of responses. Uncertainties and constraints: Future geopolitical developments could influence global cooperation on climate action. Limited financial and human resources may hinder the implementation of comprehensive low-carbon strategies.

(5.1.1.11) Rationale for choice of scenario

KMG considers three main pathways for reducing GHG emissions: Realistic scenario – Focus on operational and energy efficiency, plus two RES projects (1.28 GW in Mangystau and Zhambyl). Measures include energy management, furnace/asset optimization, fuel switch at NP3. By 2060, emissions fall 48% (10.7 → 5.5 $MtCO_2e$). Green scenario – Builds on efficiency and RES projects, adding a forestry offset pilot, purchase of RES electricity. By 2060, emissions fall 58% (10.7 → 4.5 $MtCO_2e$). Deep decarbonization scenario – Adds innovation: CCUS, hydrogen, SAF, methane reduction, large-scale offsets, forestry projects. By 2060, emissions fall 64% (10.7 → 3.9 $MtCO_2e$). All scenarios reflect Scope 2 reductions in line with Kazakhstan's Green Economy Concept (50% RES share by 2050). The green scenario is the most balanced option: it ensures a -15% reduction by 2030 vs. 2019, lowers energy costs, extends asset life, and avoids risky investments in unproven technologies. It relies on proven efficiency and RES solutions, with near-term methane reductions supporting accelerated progress. At the same time, pilot projects in CCUS, hydrogen, SAF, and forestry offsets should be pursued to build competencies for future scaling. Overall, KMG aims to focus on the deep decarbonization pathway in the long term, while prioritizing the green scenario in the near to medium term.

Water

(5.1.1.1) Scenario used

Water scenarios

☑ WRI Aqueduct

(5.1.1.3) Approach to scenario

Select from:

☑ Qualitative and quantitative

(5.1.1.4) Scenario coverage

Select from:

☑ Organization-wide

(5.1.1.5) Risk types considered in scenario

Select all that apply

☑ Policy

☑ Liability

☑ Reputation

☑ Technology

☑ Acute physical

☑ Chronic physical

(5.1.1.7) Reference year

2024

(5.1.1.8) Timeframes covered

Select all that apply

☑ Other, please specify :2033

(5.1.1.9) Driving forces in scenario

Finance and insurance

☑ Cost of capital

Regulators, legal and policy regimes

☑ Global regulation

☑ Level of action (from local to global)

☑ Global targets

(5.1.1.10) Assumptions, uncertainties and constraints in scenario

Policies in the jurisdictions covered by the scenarios. The development scenarios are defined in the draft Water Resources Management Program. Information will be disclosed in more detail after the Program is approved in 2025. The project of Program is under actualization in order to comply with the requirements of the new Water Code. At the same time targets are established within KMG International/ The measurable targers of the Petromidia Refinery for redusing water consumption are directly related to managing the risks associated with water availibility. Even though Rompetrol sites are not located in high water stress area, the Rompetrol Refinery aims to significantly reduce water intake (by 4% in 2025 and by up to 20% by 2040).

(5.1.1.11) Rationale for choice of scenario

The analysis of water management unfolds across three distinctive scenarios: Baseline Scenario: This scenario outlines the structure of overall water resource indicators based on the configuration of the baseline year, factoring in ongoing activities. Green Development Scenario: This envisions the execution of measures with ample ambition, aligning with the company's objectives for sustainable water management. Intensive Reduction Scenario: This involves the implementation of additional measures geared towards a substantial reduction in water consumption and discharge. These measures necessitate considerable financial investments.

Climate change

(5.1.1.1) Scenario used

Physical climate scenarios

☑ RCP 2.6

(5.1.1.2) Scenario used SSPs used in conjunction with scenario

Select from:

☑ No SSP used

(5.1.1.3) Approach to scenario

Select from:

☑ Qualitative and quantitative

(5.1.1.4) Scenario coverage

Select from:

☑ Organization-wide

(5.1.1.5) Risk types considered in scenario

Select all that apply

☑ Acute physical

☑ Chronic physical

(5.1.1.6) Temperature alignment of scenario

Select from:

☑ 1.6ºC - 1.9ºC

(5.1.1.7) Reference year

2019

(5.1.1.8) Timeframes covered

Select all that apply

☑ 2030

☑ 2050

☑ 2100

(5.1.1.9) Driving forces in scenario

Local ecosystem asset interactions, dependencies and impacts

☑ Changes to the state of nature

☑ Climate change (one of five drivers of nature change)

Finance and insurance

☑ Cost of capital

(5.1.1.10) Assumptions, uncertainties and constraints in scenario

A low-emission future scenario aiming to limit global warming by implementing stringent climate policies.

(5.1.1.11) Rationale for choice of scenario

KMG has conducted a detailed assessment of physical climate risks, employing several scenarios known as Representative Concentration Pathways (RCPs) by the Intergovernmental Panel on Climate Change (IPCC) to project future GHG concentrations and their potential impacts on the climate. Each RCP represents a different trajectory of radiative forcing values by 2100, reflecting varying levels of GHG emissions and subsequent climate impacts. The analysis focused on crucial climate risk factors, including cold snaps, rising average temperatures, precipitation patterns, floods, extreme weather conditions (such as wind speed), and drought. These factors were selected because they could potentially impact KMG's operations and assets. The findings revealed that KMG's assets are particularly vulnerable to two primary climate risk factors: • Temperature: Rising average temperatures can decrease worker productivity and increase energy demand for cooling buildings and structures. The most vulnerable assets include the Pavlodar Petrochemical Plant LLP, the Kazakhturkmunai LLP oil field, and PS Atasu KazTransOil JSC. • Drought: If water supplies become limited in affected regions, water shortages could significantly impact operations. The most vulnerable assets in this regard are the PS Stepnoe of KazTransOil JSC and the Alibekmola oil field of Kazakhoilaktobe LLP.

Climate change

(5.1.1.1) Scenario used

Physical climate scenarios

☑ RCP 4.5

(5.1.1.2) Scenario used SSPs used in conjunction with scenario

Select from:

☑ No SSP used

(5.1.1.3) Approach to scenario

Select from:

☑ Qualitative and quantitative

(5.1.1.4) Scenario coverage

Select from:

☑ Organization-wide

(5.1.1.5) Risk types considered in scenario

Select all that apply

☑ Acute physical

☑ Chronic physical

(5.1.1.6) Temperature alignment of scenario

Select from:

☑ 2.5ºC - 2.9ºC

(5.1.1.7) Reference year

2019

(5.1.1.8) Timeframes covered

Select all that apply

☑ 2030

☑ 2050

☑ 2100

(5.1.1.9) Driving forces in scenario

Local ecosystem asset interactions, dependencies and impacts

☑ Climate change (one of five drivers of nature change)

Finance and insurance

☑ Cost of capital

Regulators, legal and policy regimes

☑ Global regulation

☑ Global targets

(5.1.1.10) Assumptions, uncertainties and constraints in scenario

An intermediate emissions scenario representing moderate mitigation efforts.

(5.1.1.11) Rationale for choice of scenario

MG has conducted a detailed assessment of physical climate risks, employing several scenarios known as Representative Concentration Pathways (RCPs) by the Intergovernmental Panel on Climate Change (IPCC) to project future GHG concentrations and their potential impacts on the climate. Each RCP represents a different trajectory of radiative forcing values by 2100, reflecting varying levels of GHG emissions and subsequent climate impacts. The analysis focused on crucial climate risk factors, including cold snaps, rising average temperatures, precipitation patterns, floods, extreme weather conditions (such as wind speed), and drought. These factors were selected because they could potentially impact KMG's operations and assets. The findings revealed that KMG's assets are particularly vulnerable to two primary climate risk factors: • Temperature: Rising average temperatures can decrease worker productivity and increase energy demand for cooling buildings and structures. The most vulnerable assets include the Pavlodar Petrochemical Plant LLP, the Kazakhturkmunai LLP oil field, and PS Atasu KazTransOil JSC. • Drought: If water supplies become limited in affected regions, water shortages could significantly impact operations. The most vulnerable assets in this regard are the PS Stepnoe of KazTransOil JSC and the Alibekmola oil field of Kazakhoilaktobe LLP.

Climate change

(5.1.1.1) Scenario used

Physical climate scenarios

☑ RCP 8.5

(5.1.1.2) Scenario used SSPs used in conjunction with scenario

Select from:

☑ No SSP used

(5.1.1.3) Approach to scenario

Select from:

☑ Qualitative and quantitative

(5.1.1.4) Scenario coverage

Select from:

☑ Organization-wide

(5.1.1.5) Risk types considered in scenario

Select all that apply

☑ Acute physical

☑ Chronic physical

(5.1.1.6) Temperature alignment of scenario

Select from:

☑ 4.0ºC and above

(5.1.1.7) Reference year

2019

(5.1.1.8) Timeframes covered

Select all that apply

☑ 2030

☑ 2050

☑ 2100

(5.1.1.9) Driving forces in scenario

Local ecosystem asset interactions, dependencies and impacts

☑ Climate change (one of five drivers of nature change)

Finance and insurance

☑ Cost of capital

Regulators, legal and policy regimes

☑ Global regulation

☑ Global targets

(5.1.1.10) Assumptions, uncertainties and constraints in scenario

A high emission future scenario, assuming continued increases in GHG emissions without significant mitigation efforts.

(5.1.1.11) Rationale for choice of scenario

MG has conducted a detailed assessment of physical climate risks, employing several scenarios known as Representative Concentration Pathways (RCPs) by the Intergovernmental Panel on Climate Change (IPCC) to project future GHG concentrations and their potential impacts on the climate. Each RCP represents a different trajectory of radiative forcing values by 2100, reflecting varying levels of GHG emissions and subsequent climate impacts. The analysis focused on crucial climate risk factors, including cold snaps, rising average temperatures, precipitation patterns, floods, extreme weather conditions (such as wind speed), and drought. These factors were selected because they could potentially impact KMG's operations and assets. The findings revealed that KMG's assets are particularly vulnerable to two primary climate risk factors: • Temperature: Rising average temperatures can decrease worker productivity and increase energy demand for cooling buildings and structures. The most vulnerable assets include the Pavlodar Petrochemical Plant LLP, the Kazakhturkmunai LLP oil field, and PS Atasu KazTransOil JSC. • Drought: If water supplies become limited in affected regions, water shortages could significantly impact operations. The most vulnerable assets in this regard are the PS Stepnoe of KazTransOil JSC and the Alibekmola oil field of Kazakhoilaktobe LLP.

Climate change

(5.1.1.1) Scenario used

Climate transition scenarios

☑ NGFS scenarios framework, please specify :Nationally Determined Contributions (NDCs)

(5.1.1.3) Approach to scenario

Select from:

☑ Qualitative and quantitative

(5.1.1.4) Scenario coverage

Select from:

☑ Organization-wide

(5.1.1.5) Risk types considered in scenario

Select all that apply

☑ Policy

☑ Market

☑ Reputation

☑ Technology

☑ Liability

(5.1.1.6) Temperature alignment of scenario

Select from:

☑ 2.5ºC - 2.9ºC

(5.1.1.7) Reference year

2019

(5.1.1.8) Timeframes covered

Select all that apply

☑ 2030

☑ 2050

☑ 2100

(5.1.1.9) Driving forces in scenario

Local ecosystem asset interactions, dependencies and impacts

☑ Climate change (one of five drivers of nature change)

Finance and insurance

☑ Cost of capital

Regulators, legal and policy regimes

☑ Global regulation

☑ Global targets

Macro and microeconomy

☑ Domestic growth

(5.1.1.10) Assumptions, uncertainties and constraints in scenario

includes all pledged policies even if not yet implemented. Used as baseline scenario of current commitments

(5.1.1.11) Rationale for choice of scenario

KMG faces transitional risks encompassing regulatory changes, market dynamics, and technological advancements. These risks are expected to evolve, and KMG is committed to continuously reviewing and managing them to adapt to changing exposures. To analyse these risks, KMG employed a set of scenarios from the Network for Greening the Financial System (NGFS): • NDCs: This scenario includes all committed policy measures, even if they have not yet been implemented. • Below 2°C: In this scenario, the severity of climate policy gradually increases, providing a 67% chance of limiting global warming to below 2°C. • Delayed Transition: This assumes that global annual emissions will not decrease until 2030, necessitating decisive policy action to limit warming to below 2°C, with limited negative emissions. • Net Zero 2050: An ambitious scenario that limits global warming to 1.5°C through robust climate policies and innovation, achieving net-zero emissions by 2050. The analysis considered various transition risks, including regulatory, market, technological, supply chain, financial, operational, reputational, legal, and workforce-related risks. The three indicators to which KMG's assets are most vulnerable include: • Prices for Carbon Emissions: Fluctuations in carbon pricing can significantly affect operational costs and financial planning. • Primary Energy Sources: Changes in the availability and cost of primary energy sources can impact production and supply chain dynamics. • Number of Purchased Allowances: The need to purchase carbon allowances can increase financial burdens, affecting KMG's bottom line.

Climate change

(5.1.1.1) Scenario used

Climate transition scenarios

☑ NGFS scenarios framework, please specify :Below 2°C

(5.1.1.3) Approach to scenario

Select from:

☑ Qualitative and quantitative

(5.1.1.4) Scenario coverage

Select from:

☑ Organization-wide

(5.1.1.5) Risk types considered in scenario

Select all that apply

☑ Policy

☑ Market

☑ Reputation

☑ Technology

☑ Liability

(5.1.1.6) Temperature alignment of scenario

Select from:

☑ 3.0ºC - 3.4ºC

(5.1.1.7) Reference year

2019

(5.1.1.8) Timeframes covered

Select all that apply

☑ 2030

☑ 2050

☑ 2100

(5.1.1.9) Driving forces in scenario

Finance and insurance

☑ Cost of capital

Regulators, legal and policy regimes

☑ Global regulation

☑ Global targets

(5.1.1.10) Assumptions, uncertainties and constraints in scenario

Realistic scenario for alignment with Paris Agreement goals. gradually increases the stringency of climate policies, giving a 67% chance of limiting global warming to below 2 °C.

(5.1.1.11) Rationale for choice of scenario

Realistic scenario for alignment with Paris Agreement goalsKMG faces transitional risks encompassing regulatory changes, market dynamics, and technological advancements. These risks are expected to evolve, and KMG is committed to continuously reviewing and managing them to adapt to changing exposures. To analyse these risks, KMG employed a set of scenarios from the Network for Greening the Financial System (NGFS): • NDCs: This scenario includes all committed policy measures, even if they have not yet been implemented. • Below 2°C: In this scenario, the severity of climate policy gradually increases, providing a 67% chance of limiting global warming to below 2°C. • Delayed Transition: This assumes that global annual emissions will not decrease until 2030, necessitating decisive policy action to limit warming to below 2°C, with limited negative emissions. • Net Zero 2050: An ambitious scenario that limits global warming to 1.5°C through robust climate policies and innovation, achieving net-zero emissions by 2050. The analysis considered various transition risks, including regulatory, market, technological, supply chain, financial, operational, reputational, legal, and workforce-related risks. The three indicators to which KMG's assets are most vulnerable include: • Prices for Carbon Emissions: Fluctuations in carbon pricing can significantly affect operational costs and financial planning. • Primary Energy Sources: Changes in the availability and cost of primary energy sources can impact production and supply chain dynamics. • Number of Purchased Allowances: The need to purchase carbon allowances can increase financial burdens, affecting KMG's bottom line.

Climate change

(5.1.1.1) Scenario used

Climate transition scenarios

☑ NGFS scenarios framework, please specify :Delayed transition

(5.1.1.3) Approach to scenario

Select from:

☑ Qualitative and quantitative

(5.1.1.4) Scenario coverage

Select from:

☑ Organization-wide

(5.1.1.5) Risk types considered in scenario

Select all that apply

☑ Policy

☑ Market

☑ Reputation

☑ Technology

☑ Liability

(5.1.1.6) Temperature alignment of scenario

Select from:

☑ 4.0ºC and above

(5.1.1.7) Reference year

2019

(5.1.1.8) Timeframes covered

Select all that apply

☑ 2030

☑ 2050

☑ 2100

(5.1.1.9) Driving forces in scenario

Finance and insurance

☑ Cost of capital

Regulators, legal and policy regimes

☑ Global regulation

☑ Global targets

(5.1.1.10) Assumptions, uncertainties and constraints in scenario

assumes global annual emissions do not decrease until 2030. Strong policies are then needed to limit warming to below 2 °C. Negative emissions are limited. Emissions continue to rise until 2030, then sharp decline, limited negative emissions

(5.1.1.11) Rationale for choice of scenario

KMG faces transitional risks encompassing regulatory changes, market dynamics, and technological advancements. These risks are expected to evolve, and KMG is committed to continuously reviewing and managing them to adapt to changing exposures. To analyse these risks, KMG employed a set of scenarios from the Network for Greening the Financial System (NGFS): • NDCs: This scenario includes all committed policy measures, even if they have not yet been implemented. • Below 2°C: In this scenario, the severity of climate policy gradually increases, providing a 67% chance of limiting global warming to below 2°C. • Delayed Transition: This assumes that global annual emissions will not decrease until 2030, necessitating decisive policy action to limit warming to below 2°C, with limited negative emissions. • Net Zero 2050: An ambitious scenario that limits global warming to 1.5°C through robust climate policies and innovation, achieving net-zero emissions by 2050. The analysis considered various transition risks, including regulatory, market, technological, supply chain, financial, operational, reputational, legal, and workforce-related risks. The three indicators to which KMG's assets are most vulnerable include: • Prices for Carbon Emissions: Fluctuations in carbon pricing can significantly affect operational costs and financial planning. • Primary Energy Sources: Changes in the availability and cost of primary energy sources can impact production and supply chain dynamics. • Number of Purchased Allowances: The need to purchase carbon allowances can increase financial burdens, affecting KMG's bottom line.

Climate change

(5.1.1.1) Scenario used

Climate transition scenarios

☑ NGFS scenarios framework, please specify :Net Zero 2050

(5.1.1.3) Approach to scenario

Select from:

☑ Qualitative and quantitative

(5.1.1.4) Scenario coverage

Select from:

☑ Organization-wide

(5.1.1.5) Risk types considered in scenario

Select all that apply

☑ Policy

☑ Market

☑ Reputation

☑ Technology

☑ Liability

(5.1.1.6) Temperature alignment of scenario

Select from:

☑ 1.5°C or lower

(5.1.1.7) Reference year

2019

(5.1.1.8) Timeframes covered

Select all that apply

☑ 2030

☑ 2050

(5.1.1.9) Driving forces in scenario

Local ecosystem asset interactions, dependencies and impacts

☑ Climate change (one of five drivers of nature change)

Finance and insurance

☑ Cost of capital

Regulators, legal and policy regimes

☑ Global regulation

☑ Global targets

(5.1.1.10) Assumptions, uncertainties and constraints in scenario

is an ambitious scenario that limits global warming to 1.5 °C through stringent climate policies and innovation, reaching net zero emissions around 2050. Large-scale deployment of renewables, carbon neutrality by 2050, limited fossil fuel use

(5.1.1.11) Rationale for choice of scenario

KMG faces transitional risks encompassing regulatory changes, market dynamics, and technological advancements. These risks are expected to evolve, and KMG is committed to continuously reviewing and managing them to adapt to changing exposures. To analyse these risks, KMG employed a set of scenarios from the Network for Greening the Financial System (NGFS): • NDCs: This scenario includes all committed policy measures, even if they have not yet been implemented. • Below 2°C: In this scenario, the severity of climate policy gradually increases, providing a 67% chance of limiting global warming to below 2°C. • Delayed Transition: This assumes that global annual emissions will not decrease until 2030, necessitating decisive policy action to limit warming to below 2°C, with limited negative emissions. • Net Zero 2050: An ambitious scenario that limits global warming to 1.5°C through robust climate policies and innovation, achieving net-zero emissions by 2050. The analysis considered various transition risks, including regulatory, market, technological, supply chain, financial, operational, reputational, legal, and workforce-related risks. The three indicators to which KMG's assets are most vulnerable include: • Prices for Carbon Emissions: Fluctuations in carbon pricing can significantly affect operational costs and financial planning. • Primary Energy Sources: Changes in the availability and cost of primary energy sources can impact production and supply chain dynamics. • Number of Purchased Allowances: The need to purchase carbon allowances can increase financial burdens, affecting KMG's bottom line.

[Add row]

(5.1.2) Provide details of the outcomes of your organization’s scenario analysis.

Climate change

(5.1.2.1) Business processes influenced by your analysis of the reported scenarios

Select all that apply

☑ Risk and opportunities identification, assessment and management

☑ Strategy and financial planning

☑ Target setting and transition planning

(5.1.2.2) Coverage of analysis

Select from:

☑ Organization-wide

(5.1.2.3) Summarize the outcomes of the scenario analysis and any implications for other environmental issues

As a result, the analysis, as in other cases, provides two options for modeling the growth of electricity prices in the country: - soft scenario (assuming moderate growth in carbon unit prices and moderate amounts of capital investment); - tight scenario, respectively (assuming a hard carbon unit price growth scenario) and more significant capital expenditures. Assessment of the financial impact of regulatory options, the formation of the company's carbon budget to support decarbonization initiatives: The most feasible direction of decarbonization for KMG until 2030 is operational improvements, as this direction is the most common and understandable among companies in the industry and allows the use of known tools to optimize equipment and management within the existing operating structures. Based on the model analysis, the cost of electricity in the country will inevitably grow, both under the influence of national carbon regulation, and given the need to cover additional capital and investment costs in capacity renewal and implementation of RES in the energy system of the country. Reported carbon regulation risks, projected deficit of the carbon allowances, rising of the electricity prices, and an increase in the number of emergency power outages associated with outdated infrastructure of the national electricity grid and power generating facilities, KMG decided to increase its portfolio of renewable energy projects to reduce its carbon footprint as well as improve its energy security. In the medium term, the company will supply green energy both for its own needs and to the unified energy system of the country.

Water

(5.1.2.1) Business processes influenced by your analysis of the reported scenarios

Select all that apply

☑ Risk and opportunities identification, assessment and management

☑ Strategy and financial planning

☑ Target setting and transition planning

(5.1.2.2) Coverage of analysis

Select from:

☑ Organization-wide

(5.1.2.3) Summarize the outcomes of the scenario analysis and any implications for other environmental issues

The choice of which development path KMG will take will be determined after the approval of the Water Resources Management Program by the end of 2025 [Fixed row]

(5.2) Does your organization’s strategy include a climate transition plan?

(5.2.1) Transition plan

Select from:

☑ Yes, we have a climate transition plan which aligns with a 1.5°C world

(5.2.3) Publicly available climate transition plan

Select from:

☑ Yes

(5.2.4) Plan explicitly commits to cease all spending on, and revenue generation from, activities that contribute to fossil fuel expansion

Select from:

☑ No, and we do not plan to add an explicit commitment within the next two years

(5.2.6) Explain why your organization does not explicitly commit to cease all spending on and revenue generation from activities that contribute to fossil fuel expansion

As an oil extraction company, KMG is committed to the principles of sustainable development, ensuring that social considerations remain central to its operations. At present, however, the company believes that a full divestment from carbon-intensive products would be premature, as such a step could undermine economic stability and diminish the social support provided to employees and local communities. To address this challenge, KMG has adopted a Transition Strategy that focuses on the gradual reduction of fossil fuel investments rather than pursuing an abrupt exit. This measured approach enables a smoother, more predictable shift toward sustainable practices, safeguarding both economic viability and social responsibility. Given that fossil fuel activities continue to represent a significant portion of the company's revenue, a sudden withdrawal could generate financial instability and result in considerable job losses—risks KMG is determined to avoid. Moreover, KMG acknowledges its role within a complex global supply chain, where fossil fuels remain critical to many partners, suppliers, and customers. An immediate departure from these activities could disrupt established relationships and impede broader economic systems that are still reliant on traditional energy sources. Instead, KMG is channeling resources into innovation and the development of cleaner technologies within the sector, with the conviction that the energy transition can be more effective and enduring when driven from within the industry itself.

(5.2.7) Mechanism by which feedback is collected from shareholders on your climate transition plan

Select from:

☑ We have a different feedback mechanism in place

(5.2.8) Description of feedback mechanism

The shareholders of JSC NC KazMunayGas are JSC National Welfare Fund Samruk-Kazyna - 87.42%, RSE National Bank of Kazakhstan - 9.58%, as well as 3% of shares in free circulation on the KASE and AIX stock exchanges. In accordance with the Agreement on the transfer of shares of JSC KazMunayGas into trust management dated October 12, 2015 No. 505 NB / 529-i, concluded between JSC NWF Samruk-Kazyna and the National Bank of the Republic of Kazakhstan, the Fund is the holder of all voting shares of KMG. At the hearings of the portfolio companies of the Fund, JSC KazMunayGas provides the majority shareholder with a semi-annual and annual report on its activities and receives feedback. The semi-annual and annual reports include information on the implementation of the LPDP and the LPDP Action Plan. According to the Corporate Standard of Strategic and Business Planning of the Samruk-Kazyna Group of Companies, strategic planning for the development of portfolio companies, including KMG, must be consistent with the achievement of the overall strategic goals of the Fund and its portfolio companies. In addition, 3 representatives of the majority shareholder are members of the KMG Board of Directors, which directly approved the KMG Low-Carbon Development Program until 2031 and until 2060.

(5.2.9) Frequency of feedback collection

Select from:

☑ More frequently than annually

(5.2.10) Description of key assumptions and dependencies on which the transition plan relies

Policies in the jurisdictions covered by the scenario: Potential changes in legislation could alter the regulatory landscape, impacting the stringency and enforcement of policies. Macroeconomic trends: Economic downturns or global financial crises could reduce available funding for low-carbon initiatives. National- or regional-level variables: Increased frequency and severity of extreme weather events could disrupt operations and supply chains. Limited availability of natural resources in certain regions may affect production capacities. Developments in technology: Technological breakthroughs may not occur as expected, delaying the transition to low-carbon solutions. High initial costs and long development timelines for new technologies. Energy usage and mix: Fluctuations in energy prices and availability of renewable energy sources. Existing infrastructure may not support the rapid integration of renewable energy. Driving forces in scenario: The actual intensity of climate change impacts may vary, affecting the urgency and scale of responses. Uncertainties and constraints: Future geopolitical developments could influence global cooperation on climate action. Limited financial and human resources may hinder the implementation of comprehensive low-carbon strategies.

(5.2.11) Description of progress against transition plan disclosed in current or previous reporting period

1. Enhancing Energy Efficiency and Reducing Emissions Key achievements in 2024: - Implemented 70 activities under the Low-Carbon Development Plan. - Achieved annual savings of 2.36 million GJ of fuel and energy resources, equivalent to 174.9 thousand tonnes of CO_2 emissions avoided. - Optimized energy consumption at production facilities through modernization of equipment and automation of technological processes. 2. Development of Renewable Energy Key achievements in 2024: - Completed feasibility studies for renewable energy projects. - Conducted a wind potential assessment in the Zhambyl region. - Launched the process of selecting a main equipment supplier for the planned wind power plant. - At the solar power plant site, early construction works were finalized in December 2024, followed by the installation of major equipment. 3. Carbon Capture, Utilization, and Storage (CCUS) Key achievements in 2024: - Completed a CO_2 emissions screening in the Atyrau and Mangystau regions, identifying key sources totaling 412 thousand tonnes of CO_2. - Conducted an infrastructure assessment for CO_2 utilization. - Developed a concept for a pilot CCUS project at the Prorva group of fields CPF (operated by Embamunaigas JSC), with a planned capacity of 10–20 thousand tonnes of CO_2 per year. 4. Development of Hydrogen Energy Key achievements in 2024: - Conducted feasibility studies for the production of blue hydrogen, low-carbon ammonia, and methanol. - Developed a Water Resources Atlas to assess potential for green hydrogen production in western Kazakhstan. - Initiated a pilot project on green hydrogen production and application. -designed an analytical calculator to estimate the cost of green hydrogen production. - Produced the first laboratory samples of iron and titanium alloys to support the safe storage and transportation of hydrogen. 5. Production of Sustainable Aviation Fuel (SAF) Key achievements in 2024: - Completed a study on SAF production potential in Kazakhstan with support from ICF SH&E Limited. - Identified key export markets, including the European Union. - Developed preliminary technological solutions and plant capacity: first plant designed for 40,000 tonnes of SAF per year, requiring 72,000 tonnes of bioethanol. - Scheduled a feasibility study (FS) for 2025. 6. Methane Emissions Management Key achievements in 2024: - In May 2024, submitted the company's first methane emissions report under the OGMP 2.0 framework. - Prepared the report with methodological support from IFC and Carbon Limits. - In June 2024, conducted a methane measurement campaign at Ozenmunaigas JSC and KazGPZ LLP facilities, in partnership with Tetra Tech ES, Inc. - Delivered a series of trainings and seminars for production personnel on methane leak detection and repair (LDAR) technologies.

(5.2.12) Attach any relevant documents which detail your climate transition plan (optional)

LCDP_2060_ ENG -FINAL.pdf

(5.2.13) Other environmental issues that your climate transition plan considers

Select all that apply

☑ No other environmental issue considered

[Fixed row]

(5.3) Have environmental risks and opportunities affected your strategy and/or financial planning?

(5.3.1) Environmental risks and/or opportunities have affected your strategy and/or financial planning

Select from:

☑ Yes, both strategy and financial planning

(5.3.2) Business areas where environmental risks and/or opportunities have affected your strategy

Select all that apply

☑ Products and services

☑ Upstream/downstream value chain

☑ Investment in R&D

☑ Operations

[Fixed row]

(5.3.1) Describe where and how environmental risks and opportunities have affected your strategy.

Products and services

(5.3.1.1) Effect type

Select all that apply

☑ Risks

☑ Opportunities

(5.3.1.2) Environmental issues relevant to the risks and/or opportunities that have affected your strategy in this area

Select all that apply

☑ Climate change

(5.3.1.3) Describe how environmental risks and/or opportunities have affected your strategy in this area

KMG acknowledges its role in meeting Kazakhstan's obligations under the Paris Agreement, given its position as a key national company. In response to climate risks and stricter carbon regulations, KMG updated its strategy for 2021 to 2031, with a focus on "Sustainable Development and Continuous Reduction of Carbon Intensity in Production." To support this, it has approved a Low-Carbon Development Program extending to 2060 (hereafter LCDP-2060) Faced with carbon regulation risks, a projected shortage of carbon allowances, rising electricity prices, and emergency power outages due to outdated infrastructure, KMG aims to expand its renewable energy portfolio. The company plans to supply green energy for its operations and the national grid. Currently, KMG is conducting a feasibility study and assessing wind potential in two regions for the construction of wind farms with a combined capacity of 1.12 GW. KMG is implementing large-scale renewable energy projects (RES) to replace traditional carbonintensive energy sources and increase the share of clean energy in the energy mix. ● Construction of a 1 GW wind power plant with an energy storage system (Zhambyl region) – partner: Total Eren, implementation period: 2023–2027; ● 247 MW hybrid renewable power plant in Zhanaozen (Mangystau region) – partner: Eni S.p.A, implementation period: 2023–2026.

Upstream/downstream value chain

(5.3.1.1) Effect type

Select all that apply

☑ Risks

☑ Opportunities

(5.3.1.2) Environmental issues relevant to the risks and/or opportunities that have affected your strategy in this area

Select all that apply

☑ Climate change

(5.3.1.3) Describe how environmental risks and/or opportunities have affected your strategy in this area

KMG's Low-Carbon Development Program noted the need to improve procurement procedures in order to work more closely with suppliers to identify and further manage greenhouse gas emissions. Given that the rules of procurement procedures are developed by the parent company (Samruk-Kazyna JSC) and apply to all of its subsidiaries, the improvement of procurement rules will take several years. At the same time, taking into account the value chain within the KMG Group - production, transportation, processing, service - we can conclude that key categories of suppliers are excluded.

Investment in R&D

(5.3.1.1) Effect type

Select all that apply

☑ Risks

☑ Opportunities

(5.3.1.2) Environmental issues relevant to the risks and/or opportunities that have affected your strategy in this area

Select all that apply

☑ Climate change

☑ Water

(5.3.1.3) Describe how environmental risks and/or opportunities have affected your strategy in this area

In 2021, KMG launched a pilot project for carbon capture and storage (CCUS) to enhance oil recovery from depleted reservoirs, with goals set for 2031: 1. Reduce greenhouse gas emissions by capturing and injecting CO2 into depleted reservoirs or aquifers. 2. Test technology to help shape the legislative framework in Kazakhstan for CCUS projects. KMG has completed research and technical-economic analysis, identifying CO2 sources in Atyrau and Mangystau regions and locating suitable reservoirs within a 100 km radius. In 2022, KMG established the Department for Alternative Energy at KMG Engineering LLP to research green fuels, including hydrogen. This effort aims to expand scientific and production capabilities and foster the development of a hydrogen economy. Research on low-carbon hydrogen energy potential in Kazakhstan is complete, with a focused case study on blue hydrogen production at the Pavlodar Petrochemical Plant, including modernization proposals. KMG is also collaborating with Total Eren and Eni to develop renewable energy projects, including 1.12 GW wind farms in Zhambyl and Mangystau regions, and is assessing the area's wind potential. Water management projects are underway to promote water reuse, including a desalination plant in Karazhanbasmunai. Recent upgrades to treatment facilities have improved wastewater quality, with additional treatment projects at the oil refinery being analyzed.

Operations

(5.3.1.1) Effect type

Select all that apply

☑ Risks

☑ Opportunities

(5.3.1.2) Environmental issues relevant to the risks and/or opportunities that have affected your strategy in this area

Select all that apply

☑ Climate change

☑ Water

(5.3.1.3) Describe how environmental risks and/or opportunities have affected your strategy in this area

As a leading oil and gas company, KMG is fully committed to complying with the Environmental Code of the Republic of Kazakhstan (RoK), including obligations under the national Emissions Trading System (ETS). Currently, 14 subsidiaris operates under the Kazakhstan ETS, while two subsidiaries are subject to the EU ETS. At the same time, investor and parent company expectations for robust Environmental, Social, and Governance (ESG) practices are steadily increasing, which could lead to higher operational costs. To address these challenges, KMG is prioritizing operational efficiency, energy conservation, and the accelerated development of renewable energy projects. To drive progress, we are implementing our Energy Efficiency and Carbon Footprint Reduction Policy, which will be mandatory for all employees across the Group. Our strategic targets include: Reducing carbon intensity by 15% by 2031; by 64% by 2060. Achieving a 15% share of renewable energy sources (RES) in electricity consumption by 2031 anf 50% by 2060. In partnership with leading global companies, we are advancing major renewable initiatives, including a pre-feasibility study for a 247 MW hybrid power plant with Eni and a 1,000 MW wind power project with Total Eren. To ensure resilience against climate-related risks, KMG is aligning its governance and risk management practices with the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD). Looking ahead, regulatory developments will play a significant role. A new Water Code, expected in 2025, will establish clearer rules for water resource management, while newly introduced national standards for wastewater discharge are likely to require additional investments in treatment facilities by 2025.
[Add row]

(5.3.2) Describe where and how environmental risks and opportunities have affected your financial planning.

Row 1

(5.3.2.1) Financial planning elements that have been affected

Select all that apply

☑ Assets

☑ Revenues

☑ Direct costs

☑ Indirect costs

☑ Capital expenditures

☑ Acquisitions and divestments

(5.3.2.2) Effect type

Select all that apply

☑ Risks

☑ Opportunities

(5.3.2.3) Environmental issues relevant to the risks and/or opportunities that have affected these financial planning elements

Select all that apply

☑ Climate change

☑ Water

(5.3.2.4) Describe how environmental risks and/or opportunities have affected these financial planning elements

1. Acquisitions and Sales of Assets Climate risks and opportunities significantly impact the company's financial planning. Changes in market structure, such as the development of renewable energy sources, the transformation of the energy balance, and the growth of electric transport, will likely decrease long-term demand for oil in the energy sector. However, there is an increasing demand for natural gas as an alternative backup fuel in the electric power industry and as a raw material for polymers. By increasing gas production and sales through expanding associated gas processing capacities and constructing gas chemical complexes, we can enhance revenue in the long term. 2. Revenue Revenues from KMG's energy transition initiatives will continue to be assessed. The development of renewable energy sources, compensation policies, and energy efficiency improvements are expected to generate a financial benefit of USD 160.19 million annually. 3. Direct Costs KMG modeled the impact of carbon regulation to estimate direct costs. In the "Business as Usual" scenario, KMG's direct costs are projected to increase by USD 1,155.07 million per year. Therefore, implementing the Low Carbon Development Program is expected to reduce direct costs by USD 200 million compared to the "Business as Usual" scenario, while generating additional income of USD 160.19 million annually. 4. Capital Expenditures The total capital expenditure for KMG's Low Carbon Development Program from 2024 to 2031 is estimated at USD 664 million, and from 2024 to 2060 is projected at USD 2,842 million. In 2022, KMG developed and approved the Internal Carbon Pricing Program, which aims to redirect investments towards low-carbon projects as well as initiatives to reduce greenhouse gas emissions and modernize operations. 5. Assets As part of the energy transition strategy, KMG plans to develop renewable energy sources by constructing its own facilities and through mergers and acquisitions of existing projects. 6. In 2024, programs were developed to enhance the environmental efficiency of oil refineries, aiming to align wastewater quality standards with the best available technologies. This may require additional financial investments in upgrading wastewater treatment technologies at the facilities.

[Add row]

(5.4) In your organization’s financial accounting, do you identify spending/revenue that is aligned with your organization’s climate transition?

	Identification of spending/revenue that is aligned with your organization's climate transition
	Select from: ☑ No, but we plan to in the next two years

[Fixed row]

(5.5) Does your organization invest in research and development (R&D) of low-carbon products or services related to your sector activities?

(5.5.1) Investment in low-carbon R&D

Select from:

☑ Yes

(5.5.2) Comment

Hydrogen Energy In 2022, KMG established the Alternative Energy Department, previously the Hydrogen Energy Competence Center, at KMG Engineering LLP, marking a significant commitment to sustainable energy solutions. 2024 Achievements: - Conducted feasibility studies for producing blue hydrogen, low-carbon ammonia, and methanol. - Developed an Atlas of Water Resources to evaluate green hydrogen production in western Kazakhstan. - Launched a pilot project for green hydrogen, demonstrating KMG's dedication to clean energy technologies. - Created an analytical calculator for estimating green hydrogen production costs. - Produced initial laboratory samples of iron and titanium alloys for safe hydrogen storage. Renewable Energy Sources KMG is advancing major projects in renewable energy to replace carbon-intensive fuels and promote sustainability. - Constructing a 1 GW wind power plant with energy storage in Zhambyl region, in partnership with Total Eren (2023–2027). - Developing a 247 MW hybrid RES power plant in Zhanaozen with Eni S.p.A (2023–2026). 2024 Achievements: - Completed feasibility studies and assessed wind potential in Zhambyl. - Selected a supplier for the wind farm's main equipment. - Finished initial work on the solar power plant, with construction beginning in December. Sustainable Aviation Fuel (SAF) KMG is exploring Sustainable Aviation Fuel as a cleaner alternative to conventional jet fuel to reduce aviation's carbon footprint. 2024 Achievements: - Completed a study on SAF production potential, identifying the EU as a key export market. - Developed preliminary solutions for a plant targeting 40,000 tonnes of SAF per year from 72,000 tonnes of bioethanol. - Scheduled a feasibility study for 2025. Methane Reduction KMG prioritizes reducing methane emissions as part of its commitment to climate initiatives. 2024 Achievements: - Submitted its first methane emissions report as part of OGMP 2.0 in May. - Collaborated with IFC and Carbon Limits for reporting support. - Conducted a measurement campaign at Ozenmunaygas JSC and KazGPZ LLP. - Organized training sessions for personnel on technologies to monitor and eliminate methane leaks.

[Fixed row]

(5.5.7) Provide details of your organization's investments in low-carbon R&D for your sector activities over the last three years.

Row 1

(5.5.7.1) Technology area

Select from:

☑ Carbon capture, utilization, and storage (CCUS)

(5.5.7.2) Stage of development in the reporting year

Select from:

☑ Applied research and development

(5.5.7.3) Average % of total R&D investment over the last 3 years

5.15

(5.5.7.4) R&D investment figure in the reporting year (unit currency as selected in 1.2) (optional)

343991

(5.5.7.5) Average % of total R&D investment planned over the next 5 years

0

(5.5.7.6) Explain how your R&D investment in this technology area is aligned with your climate commitments and/or climate transition plan

KMG considers carbon capture and storage (CCUS) a key tool for reducing CO_2 emissions and enhancing oil recovery at fields. After 2040, a fullscale CCUS project is planned, with an estimated annual injection volume of up to 412 thousand tonnes of CO_2. Work completed in 2024: ● CO_2 emissions screening was completed in the Atyrau and Mangystau regions – key emission sources totaling 412 thousand tonnes of CO_2 were identified; ● Infrastructure for CO_2 utilization was assessed; ● A

concept was developed for a pilot CCUS project with a capacity of 10–20 thousand tonnes of CO_2 per year at the Prorva group of fields CPF operated by Embamunaigas JSC.

Row 2

(5.5.7.1) Technology area

Select from:

☑ Hydrogen

(5.5.7.2) Stage of development in the reporting year

Select from:

☑ Applied research and development

(5.5.7.3) Average % of total R&D investment over the last 3 years

11

(5.5.7.4) R&D investment figure in the reporting year (unit currency as selected in 1.2) (optional)

735538

(5.5.7.5) Average % of total R&D investment planned over the next 5 years

0

(5.5.7.6) Explain how your R&D investment in this technology area is aligned with your climate commitments and/or climate transition plan

In 2022, the Department of Alternative Energy was established on the basis of KMG Engineering LLP, which will become a research hub/center for the search for environmentally friendly fuels (including hydrogen and chemical compounds from hydrogen), the development of which will significantly expand the scientific and production potential of both the company and the country, contribute to accelerating technological growth and to form the market foundations of the hydrogen economy and become an investment in the training of domestic personnel. Work completed in 2024: ● Feasibility studies were conducted for the production of blue hydrogen, low-carbon ammonia, and methanol; ● A Water Resources Atlas was developed to assess the potential for green hydrogen production in western Kazakhstan; ● A pilot project on green hydrogen production and application is underway; ● An analytical calculator was developed to assess the cost of green

hydrogen production; ● First laboratory samples of iron and titanium alloys were obtained for the safe storage and transport of hydrogen. Successful completion of the project will enable NC KazMunayGas JSC to acquire a hydrogen transport technology for both domestic use and international export.

Row 3

(5.5.7.1) Technology area

Select from:

☑ Energy efficiency in transport

(5.5.7.2) Stage of development in the reporting year

Select from:

☑ Applied research and development

(5.5.7.3) Average % of total R&D investment over the last 3 years

0

(5.5.7.4) R&D investment figure in the reporting year (unit currency as selected in 1.2) (optional)

0

(5.5.7.5) Average % of total R&D investment planned over the next 5 years

0

(5.5.7.6) Explain how your R&D investment in this technology area is aligned with your climate commitments and/or climate transition plan

CNG filling station construction project in the western region of Kazakhstan is ultimately aimed at the promotion of natural gas use as an alternative transportation fuel. With the expansion of CNG filling station network we expect more customers to convert their vehicles to use more affordable and eco-friendly CNG instead of conventional fuels such as gasoline or diesel. Eco-fuel is widely sold in our filling stations in Europe. In 2024, the following quantities of biofuel were sold through gas stations in Romania: 84708176 liters bioethanol (0 tons of CO2); 268820103 liters of biodiesel (0 tons of CO2). Moreover, we have introduced the EV charging station one of the filling stations in Romania where free charging service is available to all customers who own electric or hybrid vehicles.

Row 4

(5.5.7.1) Technology area

Select from:

☑ Other, please specify :Methane detection and reduction

(5.5.7.2) Stage of development in the reporting year

Select from:

☑ Basic academic/theoretical research

(5.5.7.3) Average % of total R&D investment over the last 3 years

1.4

(5.5.7.4) R&D investment figure in the reporting year (unit currency as selected in 1.2) (optional)

90603

(5.5.7.5) Average % of total R&D investment planned over the next 5 years

0

(5.5.7.6) Explain how your R&D investment in this technology area is aligned with your climate commitments and/or climate transition plan

KMG collaborates with Carbon Limits, USAID, and UNDP to research best methods for mitigating methane leakage. Pilot projects on the detection and direct measurement of methane leaks at production facilities of KMG subsidiaries are implemented within the program on reduction of methane emissions. KMG expects substantial financial savings in case of full commercialisation of those projects in our production facilities. Understanding the importance of reducing methane emissions into the atmosphere, KazMunayGas became the first Kazakh national company in 2023 to join the OGMP 2.0 Partnership organised by UNEP and IMEO on the margins of the COP28 Climate Change Conference. Thus, KazMunayGas signed a Memorandum of Understanding with UNEP as part of the COP28 conference. The Oil and Gas Methane Partnership 2.0 (OGMP 2.0) is the United Nations Environment Programme's flagship programme for reporting and reducing methane emissions from the oil and gas industry. OGMP 2.0 is the only comprehensive measurement-based reporting system for the oil and gas industry that improves the accuracy and transparency of methane emissions reporting. This is key to prioritising actions to reduce methane emissions in the industry. Work completed in 2024: ● In May 2024, KMG submitted its first methane emissions report under the OGMP 2.0 framework; ● Methodological support for report

preparation was provided in cooperation with IFC and Carbon Limits; ● In June 2024, Tetra Tech ES, Inc. conducted a methane measurement campaign at Ozenmunaigas JSC and KazGPZ LLP facilities; ● A series of trainings and seminars on methane leak detection and repair (LDAR) technologies were held for production personnel. Given Kazakhstan's accession to the Global Methane Pledge and the expected tightening of methane emissions regulation in the short term, NC KazMunayGas JSC is actively working on inventorying (baseline determination) and reducing methane emissions at its facilities.
[Add row]

(5.6) Break down, by fossil fuel expansion activity, your organization's CAPEX in the reporting year and CAPEX planned over the next 5 years.

Exploration of new oil fields

(5.6.1) CAPEX in the reporting year for this expansion activity (unit currency as selected in 1.2)

696768

(5.6.2) CAPEX in the reporting year for this expansion activity as % of total CAPEX in the reporting year

0.05

(5.6.3) CAPEX planned over the next 5 years for this expansion activity as % of total CAPEX planned over the next 5 years

0.1

(5.6.4) Explain your CAPEX calculations, including any assumptions

CAPEX calculations for new fields are given for both oil and gas fields. Separate accounting is not conducted.

Exploration of new natural gas fields

(5.6.1) CAPEX in the reporting year for this expansion activity (unit currency as selected in 1.2)

696768

(5.6.2) CAPEX in the reporting year for this expansion activity as % of total CAPEX in the reporting year

0.05

(5.6.3) CAPEX planned over the next 5 years for this expansion activity as % of total CAPEX planned over the next 5 years

0.1

(5.6.4) Explain your CAPEX calculations, including any assumptions

CAPEX calculations for new fields are given for both oil and gas fields. Separate accounting is not conducted.

Expansion of existing oil fields

(5.6.1) CAPEX in the reporting year for this expansion activity (unit currency as selected in 1.2)

228737934

(5.6.2) CAPEX in the reporting year for this expansion activity as % of total CAPEX in the reporting year

15

(5.6.3) CAPEX planned over the next 5 years for this expansion activity as % of total CAPEX planned over the next 5 years

6.37

(5.6.4) Explain your CAPEX calculations, including any assumptions

CAPEX calculations for expansion of fields are given for both oil and gas fields. Separate accounting is not conducted.

Expansion of existing natural gas fields

(5.6.1) CAPEX in the reporting year for this expansion activity (unit currency as selected in 1.2)

228737934

(5.6.2) CAPEX in the reporting year for this expansion activity as % of total CAPEX in the reporting year

15

(5.6.3) CAPEX planned over the next 5 years for this expansion activity as % of total CAPEX planned over the next 5 years

6.37

(5.6.4) Explain your CAPEX calculations, including any assumptions

CAPEX calculations for expansion of fields are given for both oil and gas fields. Separate accounting is not conducted.
[Fixed row]

(5.8) Disclose the breakeven price (US$/BOE) required for cash neutrality during the reporting year, i.e. where cash flow from operations covers CAPEX and dividends paid / share buybacks.

59

(5.9) What is the trend in your organization’s water-related capital expenditure (CAPEX) and operating expenditure (OPEX) for the reporting year, and the anticipated trend for the next reporting year?

(5.9.1) Water-related CAPEX (+/- % change)

95

(5.9.2) Anticipated forward trend for CAPEX (+/- % change)

1

(5.9.3) Water-related OPEX (+/- % change)

10

(5.9.4) Anticipated forward trend for OPEX (+/- % change)

16

(5.9.5) Please explain

The difference in capital expenditures between 2023 and 2024 was 95%, meaning that the main costs were incurred in 2023 for the construction and commissioning of the Astrakhan-Mangyshlak water pipeline. Capital expenditures in 2025 are planned at a level higher than 5% of the actual 2024 level. The difference in operating costs is approximately +/- 10%.
[Fixed row]

(5.10) Does your organization use an internal price on environmental externalities?

	Use of internal pricing of environmental externalities	Environmental externality priced
	Select from: ☑ Yes	*Select all that apply* ☑ Carbon ☑ Water

[Fixed row]

(5.10.1) Provide details of your organization's internal price on carbon.

Row 1

(5.10.1.1) Type of pricing scheme

Select from:
☑ Shadow price

(5.10.1.2) Objectives for implementing internal price

Select all that apply

☑ Drive energy efficiency

☑ Drive low-carbon investment

☑ Navigate regulations

☑ Setting and/or achieving of climate-related policies and targets

☑ Stress test investments

(5.10.1.3) Factors considered when determining the price

Select all that apply

☑ Alignment with the price of allowances under an Emissions Trading Scheme

(5.10.1.4) Calculation methodology and assumptions made in determining the price

Scenarios of changes in the shadow price level are based on KMG's forecasts for further changes in quotas prices in Kazakhstan ETS. The reduction of free quotas issued under the National Plan the total carbon budget of Kazakhstan, the inflation and exchange rate are taken into account.

(5.10.1.5) Scopes covered

Select all that apply

☑ Scope 1

(5.10.1.6) Pricing approach used – spatial variance

Select from:

☑ Uniform

(5.10.1.8) Pricing approach used – temporal variance

Select from:

☑ Evolutionary

(5.10.1.9) Indicate how you expect the price to change over time

As part of the current National Quota Allocation Plan for 2022-2025, an annual reduction in the volume of free quotas is provided for by 1.5%. KMG assumes that in order to achieve of Kazakhstan's NDC goals by 2030, within the framework of coming National Plan from 2026 the reduction will exceed 6% annually. It means covering 75% of companies' emissions with quotas by 2030. Annual inflation is estimated at 6-10%. The expected prices for carbon quotas will be: 3.16$ by 2026, 10.53$ by 2030, 19 $by 2040, 43.2$ by 2050. Due to the fact that further plans to reduce the volume of free quotas after 2025 have not been approved these indicators are dynamic and subject to revision as the data is updated.

(5.10.1.10) Minimum actual price used (currency per metric ton CO2e)

0.85

(5.10.1.11) Maximum actual price used (currency per metric ton CO2e)

0.85

(5.10.1.12) Business decision-making processes the internal price is applied to

Select all that apply

☑ Capital expenditure

(5.10.1.13) Internal price is mandatory within business decision-making processes

Select from:

☑ Yes, for all decision-making processes

(5.10.1.14) % total emissions in the reporting year in selected scopes this internal price covers

75

(5.10.1.15) Pricing approach is monitored and evaluated to achieve objectives

Select from:

☑ Yes

(5.10.1.16) Details of how the pricing approach is monitored and evaluated to achieve your objectives

The use of a shadow price when evaluating capital investments in new projects and acquisitions helps the company to form a more stable portfolio of assets to external carbon regulation, as well as to invest in assets that will meet KazMunayGas' goal of reducing greenhouse gas emissions by 15% by 2031 and 64% by 2060.

For instance, in 2022, the possibility of transfer to trust management (operational control) was considered KazMunayGas of the gas turbine power plant "Karabatan". During the review of the project within the framework of a comprehensive technical and economic assessment, one of the mandatory conditions of which is now the assessment of the carbon footprint of the project and financial aspects related to carbon regulation, it was revealed that the company's costs for compliance with carbon regulation will amount to more than 44 billion tenge (95.65 million US dollars). As a result, the company abandoned the project. The reverse example, when taking into account the shadow carbon price allowed to increase the profitability of low-carbon projects was the evaluation of the project for the construction of the Mirny wind power plant with a capacity of 1 GW and a hybrid power plant (solar + wind + gas) in the Mangystau region with a capacity of 120 MW. Both projects, in addition to the profit from generating clean electricity, will also generate income from the sale of offset units, as well as ensure the consumption of KMG's nearby subsidiaries with clean energy, which will reduce Scope 2 emissions in the company as a whole. KMG also uses a shadow price in its financial and economic model to assess its financial performance, as well as the efficiency of resource allocation and strategic decision-making support.
[Add row]

(5.10.2) Provide details of your organization’s internal price on water.

Row 1

(5.10.2.1) Type of pricing scheme

Select from:

☑ Other, please specify :Tariff taking into account natural monopolies.

(5.10.2.2) Objectives for implementing internal price

Select all that apply

☑ Drive water-related investment

(5.10.2.3) Factors beyond current market price are considered in the price

Select from:

☑ Yes

(5.10.2.4) Factors considered when determining the price

Select all that apply

☑ Alignment to international standards

☑ Costs of transporting water

(5.10.2.5) Calculation methodology and assumptions made in determining the price

By the order of the Department of the Committee for Regulation of Natural Monopolies of the Ministry of National Economy of the Republic of Kazakhstan for Atyrau Region (hereinafter referred to as DKREM) dated August 28, 2023 No. 56-OD, amendments were made to the order of DKREM dated August 19, 2022 No. 74-OD "On approval of tariffs and tariff estimate of Magistralny Vodovod Limited Liability Partnership for the regulated service of water supply through main pipelines for 2022-2027" with entry into force on September 1, 2023: - population, budgetary and non-profit organizations, as well as other enterprises providing utilities to the population, budgetary and non-profit organizations - 18.04 tenge / m³; - agricultural producer - 64.98 tenge / m³; - industrial enterprises and other commercial organizations - 626.66 tenge/m³; - oil and gas producing enterprises - 1,870.55 tenge/m³. Taking this into account, the average tariff increased from 455.87 to 626.66 tenge/m³ or by 170.79 tenge/m³, which is 37%. At the same time, the tariff for the population, budgetary and non-profit organizations, as well as other enterprises providing public services to the population, budgetary and non-profit organizations, agricultural producers, the tariff remains at the same level without changes.

(5.10.2.6) Stages of the value chain covered

Select all that apply

☑ Direct operations

☑ Upstream value chain

(5.10.2.7) Pricing approach used – spatial variance

Select from:

☑ Differentiated

(5.10.2.8) Indicate how and why the price is differentiated

Population, budgetary and non-profit organizations, as well as other enterprises providing utilities to the population, budgetary and non-profit organizations - 18.04 tenge / m³; - agricultural producer - 64.98 tenge / m³; - industrial enterprises and other commercial organizations - 626.66 tenge/m³; - oil and gas producing enterprises - 1,870.55 tenge/m³.

(5.10.2.9) Pricing approach used – temporal variance

Select from:

☑ Static

(5.10.2.11) Minimum actual price used (currency per cubic meter)

0.04

(5.10.2.12) Maximum actual price used (currency per cubic meter)

3.98

(5.10.2.13) Business decision-making processes the internal water price is applied to

Select all that apply

☑ Capital expenditure

☑ Operations

(5.10.2.14) Internal price is mandatory within business decision-making processes

Select from:

☑ Yes, for some decision-making processes, please specify :The Committee for Regulation of Natural Monopolies of the Ministry of National Economy of the Republic of Kazakhstan sets tariffs, we as KMG can influence the setting of prices for industrial enterprises and other commercial organizations through coo

(5.10.2.15) Pricing approach is monitored and evaluated to achieve objectives

Select from:

☑ Yes

(5.10.2.16) Details of how the pricing approach is monitored and evaluated to achieve your objectives

The tariff is monitored by the supervisory authority in the sphere of natural monopolies.
[Add row]

(5.11) Do you engage with your value chain on environmental issues?

	Engaging with this stakeholder on environmental issues	Environmental issues covered
Suppliers	*Select from:* ☑ Yes	*Select all that apply* ☑ Climate change ☑ Water
Customers	*Select from:* ☑ Yes	*Select all that apply* ☑ Climate change ☑ Water
Investors and shareholders	*Select from:* ☑ Yes	*Select all that apply* ☑ Climate change ☑ Water
Other value chain stakeholders	*Select from:* ☑ Yes	*Select all that apply* ☑ Climate change ☑ Water

[Fixed row]

(5.11.1) Does your organization assess and classify suppliers according to their dependencies and/or impacts on the environment?

	Assessment of supplier dependencies and/or impacts on the environment
Climate change	*Select from:*

	Assessment of supplier dependencies and/or impacts on the environment
	☑ No, we do not currently assess the dependencies and/or impacts of our suppliers, but we plan to do so within the next two years
Water	*Select from:* ☑ No, we do not currently assess the dependencies and/or impacts of our suppliers, but we plan to do so within the next two years

[Fixed row]

(5.11.2) Does your organization prioritize which suppliers to engage with on environmental issues?

Climate change

(5.11.2.1) Supplier engagement prioritization on this environmental issue

Select from:

☑ No, we do not prioritize which suppliers to engage with on this environmental issue

(5.11.2.3) Primary reason for no supplier prioritization on this environmental issue

Select from:

☑ Other, please specify :KMG - is a national company, the procurement rules established by the state shareholder.

(5.11.2.4) Please explain

In the Low-Carbon Development Program, KMG has identified the necessity of implementing sustainable procurement to reduce emissions in Scope 3. In this regard, it is planned to explore the suppliers' activities.

Water

(5.11.2.1) Supplier engagement prioritization on this environmental issue

Select from:

☑ No, we do not prioritize which suppliers to engage with on this environmental issue

(5.11.2.3) Primary reason for no supplier prioritization on this environmental issue

Select from:

☑ Other, please specify :KMG - is a national company, the procurement rules established by the state shareholder.

(5.11.2.4) Please explain

The Water Management Programme project includes a supply chain audit to be conducted over the next few years to subsequently calculate the water footprint in the supply chain and determine additional requirements for suppliers.
[Fixed row]

(5.11.5) Do your suppliers have to meet environmental requirements as part of your organization's purchasing process?

	Suppliers have to meet specific environmental requirements related to this environmental issue as part of the purchasing process	Comment
Climate change	*Select from:* ☑ No, but we plan to introduce environmental requirements related to this environmental issue within the next two years	*There is a comprehensive non-compliance policy that cover all environmental regulations in KMG including GHG and climate change issues.*
Water	*Select from:* ☑ No, but we plan to introduce environmental requirements related to this environmental issue within the next two years	*There is a comprehensive non-compliance policy that cover all environmental regulations in KMG*

[Fixed row]

(5.11.7) Provide further details of your organization’s supplier engagement on environmental issues.

Climate change

(5.11.7.2) Action driven by supplier engagement

Select from:

☑ No other supplier engagement

Water

(5.11.7.2) Action driven by supplier engagement

Select from:

☑ No other supplier engagement

(5.11.7.10) Engagement is helping your tier 1 suppliers meet an environmental requirement related to this environmental issue

Select from:

☑ No, this engagement is unrelated to meeting an environmental requirement

[Add row]

(5.11.9) Provide details of any environmental engagement activity with other stakeholders in the value chain.

Climate change

(5.11.9.1) Type of stakeholder

Select from:

☑ Other value chain stakeholder, please specify :Suppliers

(5.11.9.2) Type and details of engagement

Education/Information sharing

☑ Share information on environmental initiatives, progress and achievements

(5.11.9.3) % of stakeholder type engaged

Select from:

☑ 1-25%

(5.11.9.4) % stakeholder-associated scope 3 emissions

Select from:

☑ 1-25%

(5.11.9.5) Rationale for engaging these stakeholders and scope of engagement

In the Low-Carbon Development Program, KMG has identified the necessity of implementing sustainable procurement to reduce emissions in Scope 3. So, we conduct an assessment of categories 3 and 9 within Scope 3, in accordance with the GHG Protocol methodology. At the same time, it is planned to expand the coverage of suppliers' activities. Simultaneously, taking into account the value chain within the KMG Group - production, transportation, processing, service - we can conclude that key categories of suppliers are excluded.

(5.11.9.6) Effect of engagement and measures of success

Taking into account the value chain within the KMG Group - production, transportation, processing, service - we can conclude that key categories of suppliers are excluded. At the same, we conduct an assessment of categories 3 and 9 within Scope 3, in accordance with the GHG Protocol methodology. Communication Methods: interaction for sharing information is carried out through reporting on the KMG website.

Water

(5.11.9.1) Type of stakeholder

Select from:

☑ Investors and shareholders

(5.11.9.2) Type and details of engagement

Education/Information sharing

☑ Share information on environmental initiatives, progress and achievements

(5.11.9.3) % of stakeholder type engaged

Select from:

☑ 1-25%

(5.11.9.5) Rationale for engaging these stakeholders and scope of engagement

Data on water footprint and water resource management are openly published in the company's reports and are taken into account when assigning a KMG ESG rating.

(5.11.9.6) Effect of engagement and measures of success

Availability of information on quantitative and qualitative indicators affects the KMG rating, which helps investors evaluate the management in the company.

Climate change

(5.11.9.1) Type of stakeholder

Select from:

☑ Investors and shareholders

(5.11.9.2) Type and details of engagement

Education/Information sharing

☑ Share information on environmental initiatives, progress and achievements

(5.11.9.3) % of stakeholder type engaged

Select from:

☑ 76-99%

(5.11.9.4) % stakeholder-associated scope 3 emissions

Select from:

☑ None

(5.11.9.5) Rationale for engaging these stakeholders and scope of engagement

The Company consistently improves its environmental performance, ensuring stability and value growth for shareholders. In 2024, KMG successfully implemented strategic initiatives aimed at enhancing operational and energy efficiency. A key milestone was the development of a new Low-Carbon Development Program through 2060, aimed at reducing environmental impact and supporting the sustainable transformation of the business. In addition, the Company remains committed to high standards of corporate governance, ensuring transparency in reporting and the protection of shareholder rights.

(5.11.9.6) Effect of engagement and measures of success

Communication Methods: publication of reports, disclosure of information on the corporate website, shareholder meetings, reporting via the Kazakhstan Stock Exchange

Climate change

(5.11.9.1) Type of stakeholder

Select from:

☑ Other value chain stakeholder, please specify :employees

(5.11.9.2) Type and details of engagement

Education/Information sharing

☑ Share information on environmental initiatives, progress and achievements

(5.11.9.3) % of stakeholder type engaged

Select from:

☑ 76-99%

(5.11.9.4) % stakeholder-associated scope 3 emissions

Select from:

☑ 26-50%

(5.11.9.5) Rationale for engaging these stakeholders and scope of engagement

In the Low-Carbon Development Program, KMG has identified the necessity to reduce emissions in Scope 3. So, we conduct an assessment of categories 6 and 7 within Scope 3, in accordance with the GHG Protocol methodology.

(5.11.9.6) Effect of engagement and measures of success

Communication Methods: internal digital platform, outlook, meetings, social media, publication of reports, disclosure of information on the corporate website.

Climate change

(5.11.9.1) Type of stakeholder

Select from:

☑ Customers

(5.11.9.2) Type and details of engagement

Education/Information sharing

☑ Share information on environmental initiatives, progress and achievements

(5.11.9.3) % of stakeholder type engaged

Select from:

☑ 76-99%

(5.11.9.4) % stakeholder-associated scope 3 emissions

Select from:

☑ 76-99%

(5.11.9.5) Rationale for engaging these stakeholders and scope of engagement

In the Low-Carbon Development Program, KMG has identified the necessity to reduce emissions in Scope 3. So, we conduct an assessment of category 11 within Scope 3, in accordance with the GHG Protocol methodology.

(5.11.9.6) Effect of engagement and measures of success

Communication Methods: publication of reports, disclosure of information on the corporate website and in corporate social media, reporting via the Kazakhstan Stock Exchange
[Add row]

(5.12) Indicate any mutually beneficial environmental initiatives you could collaborate on with specific CDP Supply Chain members.

Row 1

(5.12.1) Requesting member

Select from:

(5.12.2) Environmental issues the initiative relates to

Select all that apply
☑ Climate change

(5.12.4) Initiative category and type

Change to supplier operations
☑ Assess life-cycle impact of products or services to identify efficiencies

(5.12.5) Details of initiative

KMG International N.V. have a cooperation with Greiner Packaging SRL, which is located in Romania and is part of the Greiner AG group. In 2024, they purchased 2,855 tons of polypropylene. In line with our strategy to reduce the carbon footprint of our products, we believe that over time, Greiner's scope 3 (category 1) carbon footprint will also be reduced within the supply chain. We appreciate the opportunity to explore potential collaboration, but are unable to proceed at this time.

(5.12.6) Expected benefits

Select all that apply

☑ Increased transparency of upstream/downstream value chain

☑ Reduction of downstream value chain emissions (own scope 3)

(5.12.7) Estimated timeframe for realization of benefits

Select from:

☑ > 5 years

(5.12.8) Are you able to estimate the lifetime CO2e and/or water savings of this initiative?

Select from:

☑ No

(5.12.11) Please explain

KMG International N.V. have a cooperation with Greiner Packaging SRL, which is located in Romania and is part of the Greiner AG group. In 2024, they purchased 2,855 tons of polypropylene. In line with our strategy to reduce the carbon footprint of our products, we believe that over time, Greiner's scope 3 (category 1) carbon footprint will also be reduced within the supply chain. We appreciate the opportunity to explore potential collaboration, but are unable to proceed at this time.
[Add row]

(5.13) Has your organization already implemented any mutually beneficial environmental initiatives due to CDP Supply Chain member engagement?

	Environmental initiatives implemented due to CDP Supply Chain member engagement	Primary reason for not implementing environmental initiatives	Explain why your organization has not implemented any environmental initiatives
	Select from: ☑ No, but we plan to within the next two years	*Select from:* ☑ Other, please specify :Our key stakeholders are not members of the CDP Supply Chain, but we are going to explore future opportunities	*Our key stakeholders are not members of the CDP Supply Chain, but we are going to explore future opportunities.*

[Fixed row]

C6. Environmental Performance - Consolidation Approach

(6.1) Provide details on your chosen consolidation approach for the calculation of environmental performance data.

Climate change

(6.1.1) Consolidation approach used

Select from:

☑ Operational control

(6.1.2) Provide the rationale for the choice of consolidation approach

We use the same consolidation approach for environmental reporting as we do for financial accounting, which is based on operational control. Our reporting includes companies where KMG holds an ownership interest of 50% or more and has effective control over their operational activities. Importantly, we include 100% of the environmental impact of these assets in our environmental reporting, regardless of the ownership share. This approach ensures a more comprehensive and transparent representation of the environmental footprint of our operations. Additionally, we adhere to the methodology set by the Science Based Targets initiative (SBTi), which aligns our climate goals with the latest scientific data and the objectives of the Paris Agreement. By committing to SBTi, we aim to reduce greenhouse gas emissions in accordance with science-based pathways that limit global warming to well below 2°C above pre-industrial levels, with an aspirational target of 1.5°C.

Water

(6.1.1) Consolidation approach used

Select from:

☑ Operational control

(6.1.2) Provide the rationale for the choice of consolidation approach

We have adopted the same consolidation approach as used in our financial accounting. This approach facilitates integration and consistency between our financial and environmental data, enhancing the reliability and transparency of our reporting.

Plastics

(6.1.1) Consolidation approach used

Select from:

☑ Operational control

(6.1.2) Provide the rationale for the choice of consolidation approach

We have adopted the same consolidation approach as used in our financial accounting. This approach facilitates integration and consistency between our financial and environmental data, enhancing the reliability and transparency of our reporting.

Biodiversity

(6.1.1) Consolidation approach used

Select from:

☑ Operational control

(6.1.2) Provide the rationale for the choice of consolidation approach

We have adopted the same consolidation approach as used in our financial accounting. This approach facilitates integration and consistency between our financial and environmental data, enhancing the reliability and transparency of our reporting.
[Fixed row]

C7. Environmental performance - Climate Change

(7.1) Is this your first year of reporting emissions data to CDP?

Select from:

☑ No

(7.1.1) Has your organization undergone any structural changes in the reporting year, or are any previous structural changes being accounted for in this disclosure of emissions data?

(7.1.1.1) Has there been a structural change?

Select all that apply

☑ Yes, other structural change, please specify

(7.1.1.2) Name of organization(s) acquired, divested from, or merged with

● 2 companies were liquidated: Snow Leopard International Inc., and KMG-Ustyurt LLP; ● Equity stakes were sold in 2 companies: Karaton Operating Ltd., and Silleno LLP. ● 3 companies were liquidated: AktauOilMash LLP, Caspi Meruerty Operating Company B.V., and BIO ADVANCED ENERGY SAS; ● 2 companies were established: Mangistau Power B.V. and Mangistau Renewables B.V.

(7.1.1.3) Details of structural change(s), including completion dates

On November 13, 2024, the Board of Directors of KMG approved an updated List of Non-Strategic Assets, which provides for the divestment of 7 companies during the period from 2024 to 2025. In accordance with this list, the following actions were taken in 2024: ● 2 companies were liquidated: Snow Leopard International Inc., and KMG-Ustyurt LLP; ● Equity stakes were sold in 2 companies: Karaton Operating Ltd., and Silleno LLP. In addition, in 2024, the following companies were either divested or established, although they are not included in the list of companies in which 50% or more of the voting shares (equity interest) are directly or indirectly owned by KMG: ● 3 companies were liquidated: AktauOilMash LLP, Caspi Meruerty Operating Company B.V., and BIO ADVANCED ENERGY SAS; ● 2 companies were established: Mangistau Power B.V. and Mangistau Renewables B.V.
[Fixed row]

(7.1.2) Has your emissions accounting methodology, boundary, and/or reporting year definition changed in the reporting year?

(7.1.2.1) Change(s) in methodology, boundary, and/or reporting year definition?

Select all that apply

☑ Yes, a change in boundary

(7.1.2.2) Details of methodology, boundary, and/or reporting year definition change(s)

With the update of the LCDP to 2060, the reporting boundaries have been revised, resulting in an expanded perimeter. The number of subsidiaries included in the LCDP scope has increased and now covers the polypropylene production plant - KPI, as well as the oil production companies Ural Oil Gas, Urihtau Operating, and Dunga Operating. Also KMG added 3 oilservice companies.
[Fixed row]

(7.1.3) Have your organization’s base year emissions and past years’ emissions been recalculated as a result of any changes or errors reported in 7.1.1 and/or 7.1.2?

	Base year recalculation	Base year emissions recalculation policy, including significance threshold	Past years’ recalculation
	Select from: ☑ No, because the operations acquired or divested did not exist in the base year	*The base year has not been recalculated. Other than the inclusion of new subsidiaries, no further changes have been made.*	*Select from:* ☑ No

[Fixed row]

(7.2) Select the name of the standard, protocol, or methodology you have used to collect activity data and calculate emissions.

Select all that apply

☑ American Petroleum Institute Compendium of Greenhouse Gas Emissions Methodologies for the Oil and Natural Gas Industry, 2009

☑ European Union Emission Trading System (EU ETS): The Monitoring and Reporting Regulation (MMR) – General guidance for installations

☑ 2019 Refinement to the 2006 IPCC Guidelines for National Greenhouse Gas Inventories

☑ The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard (Revised Edition)

☑ Other, please specify :The National guidelines for the calculation of GHG emissions were used to assess direct emission amounts for our facilities located in Kazakhstan - 4 methodologies. GHG Protocol Scope 2 Guidance and CDP Technical Note: Accounting of Scope 2 emissions

(7.3) Describe your organization’s approach to reporting Scope 2 emissions.

(7.3.1) Scope 2, location-based

Select from:

☑ We are reporting a Scope 2, location-based figure

(7.3.2) Scope 2, market-based

Select from:

☑ We are reporting a Scope 2, market-based figure

(7.3.3) Comment

Location-based Scope 2 emissions for assets in Kazakhstan and Georgia are determined using the respective national energy production emission factors, while market-based Scope 2 emissions for assets in Romania are calculated based on RE-DISS residual mix factors.
[Fixed row]

(7.4) Are there any sources (e.g. facilities, specific GHGs, activities, geographies, etc.) of Scope 1, Scope 2 or Scope 3 emissions that are within your selected reporting boundary which are not included in your disclosure?

Select from:

☑ No

(7.5) Provide your base year and base year emissions.

Scope 1

(7.5.1) Base year end

12/31/2019

(7.5.2) Base year emissions (metric tons CO2e)

8899528.5

(7.5.3) Methodological details

Base year emissions were recalculated due to changes in the methodology for calculating Scope 1 emissions and the exclusion of KazMunaiTeniz LLP.

Scope 2 (location-based)

(7.5.1) Base year end

12/31/2019

(7.5.2) Base year emissions (metric tons CO2e)

3303442.1

(7.5.3) Methodological details

Base year emissions were recalculated due to the exclusion of KazMunaiTeniz LLP

Scope 2 (market-based)

(7.5.1) Base year end

12/31/2019

(7.5.2) Base year emissions (metric tons CO2e)

3358555

(7.5.3) Methodological details

Base year emissions were recalculated due to the exclusion of KazMunaiTeniz LLP

Scope 3 category 1: Purchased goods and services

(7.5.1) Base year end

12/30/2019

(7.5.2) Base year emissions (metric tons CO2e)

0

(7.5.3) Methodological details

not calculated in the base year

Scope 3 category 2: Capital goods

(7.5.1) Base year end

12/30/2019

(7.5.2) Base year emissions (metric tons CO2e)

0

(7.5.3) Methodological details

not calculated in the base year

Scope 3 category 3: Fuel-and-energy-related activities (not included in Scope 1 or 2)

(7.5.1) Base year end

12/30/2019

(7.5.2) Base year emissions (metric tons CO2e)

0

(7.5.3) Methodological details

not calculated in the base year

Scope 3 category 4: Upstream transportation and distribution

(7.5.1) Base year end

12/30/2019

(7.5.2) Base year emissions (metric tons CO2e)

0

(7.5.3) Methodological details

not calculated in the base year

Scope 3 category 5: Waste generated in operations

(7.5.1) Base year end

12/30/2019

(7.5.2) Base year emissions (metric tons CO2e)

0

(7.5.3) Methodological details

not calculated in the base year

Scope 3 category 6: Business travel

(7.5.1) Base year end

12/30/2019

(7.5.2) Base year emissions (metric tons CO2e)

0

(7.5.3) Methodological details

not calculated in the base year

Scope 3 category 7: Employee commuting

(7.5.1) Base year end

12/30/2019

(7.5.2) Base year emissions (metric tons CO2e)

0

(7.5.3) Methodological details

not calculated in the base year

Scope 3 category 8: Upstream leased assets

(7.5.1) Base year end

12/30/2019

(7.5.2) Base year emissions (metric tons CO2e)

0

(7.5.3) Methodological details

not calculated in the base year

Scope 3 category 9: Downstream transportation and distribution

(7.5.1) Base year end

12/30/2019

(7.5.2) Base year emissions (metric tons CO2e)

0

(7.5.3) Methodological details

not calculated in the base year

Scope 3 category 10: Processing of sold products

(7.5.1) Base year end

12/30/2019

(7.5.2) Base year emissions (metric tons CO2e)

0

(7.5.3) Methodological details

not calculated in the base year

Scope 3 category 11: Use of sold products

(7.5.1) Base year end

12/31/2019

(7.5.2) Base year emissions (metric tons CO2e)

71314661.3

(7.5.3) Methodological details

Base year emissions were recalculated due to the exclusion of KazMunaiTeniz LLP

Scope 3 category 12: End of life treatment of sold products

(7.5.1) Base year end

12/30/2019

(7.5.2) Base year emissions (metric tons CO2e)

0

(7.5.3) Methodological details

not calculated in the base year

Scope 3 category 13: Downstream leased assets

(7.5.1) Base year end

12/30/2019

(7.5.2) Base year emissions (metric tons CO2e)

0

(7.5.3) Methodological details

not calculated in the base year

Scope 3 category 14: Franchises

(7.5.1) Base year end

12/30/2019

(7.5.2) Base year emissions (metric tons CO2e)

0

(7.5.3) Methodological details

not calculated in the base year

Scope 3 category 15: Investments

(7.5.1) Base year end

12/30/2019

(7.5.2) Base year emissions (metric tons CO2e)

0

(7.5.3) Methodological details

not calculated in the base year

Scope 3: Other (upstream)

(7.5.1) Base year end

12/30/2019

(7.5.2) Base year emissions (metric tons CO2e)

0

(7.5.3) Methodological details

not calculated in the base year

Scope 3: Other (downstream)

(7.5.1) Base year end

12/30/2019

(7.5.2) Base year emissions (metric tons CO2e)

0

(7.5.3) Methodological details

not calculated in the base year
[Fixed row]

(7.6) What were your organization’s gross global Scope 1 emissions in metric tons CO2e?

	Gross global Scope 1 emissions (metric tons CO2e)	End date	Methodological details
Reporting year	*9058706*	*Date input [must be between [11/19/2015 - 11/19/2024]*	*emissions were calculated using the national methodology*
Past year 1	*8479969*	*12/30/2023*	*emissions were calculated using the national methodology*
Past year 2	*8076436*	*12/30/2022*	*emissions were calculated using the national methodology*
Past year 3	*10611090*	*12/30/2021*	*emissions were calculated using the national methodology*

[Fixed row]

(7.7) What were your organization's gross global Scope 2 emissions in metric tons CO2e?

Reporting year

(7.7.1) Gross global Scope 2, location-based emissions (metric tons CO2e)

3418616

(7.7.2) Gross global Scope 2, market-based emissions (metric tons CO2e)

3343822

(7.7.4) Methodological details

Location-based Scope 2 emissions for our assets located in Kazakhstan and Georgia are calculated using available national energy production emissions factors. Market-based Scope 2 emissions for our assets in Romania are calculated using residual mix factors.

Past year 1

(7.7.1) Gross global Scope 2, location-based emissions (metric tons CO2e)

3457871

(7.7.2) Gross global Scope 2, market-based emissions (metric tons CO2e)

3374698

(7.7.3) End date

12/30/2023

(7.7.4) Methodological details

Location-based Scope 2 emissions for our assets located in Kazakhstan and Georgia are calculated using available national energy production emissions factors. Market-based Scope 2 emissions for our assets in Romania are calculated using residual mix factors.

Past year 2

(7.7.1) Gross global Scope 2, location-based emissions (metric tons CO2e)

3278950

(7.7.2) Gross global Scope 2, market-based emissions (metric tons CO2e)

3217033

(7.7.3) End date

12/30/2022

(7.7.4) Methodological details

Location-based Scope 2 emissions for our assets located in Kazakhstan and Georgia are calculated using available national energy production emissions factors. Market-based Scope 2 emissions for our assets in Romania are calculated using residual mix factors.

Past year 3

(7.7.1) Gross global Scope 2, location-based emissions (metric tons CO2e)

3339396

(7.7.2) Gross global Scope 2, market-based emissions (metric tons CO2e)

3313408

(7.7.3) End date

12/30/2021

(7.7.4) Methodological details

Location-based Scope 2 emissions for our assets located in Kazakhstan and Georgia are calculated using available national energy production emissions factors. Market-based Scope 2 emissions for our assets in Romania are calculated using residual mix factors.
[Fixed row]

(7.8) Account for your organization’s gross global Scope 3 emissions, disclosing and explaining any exclusions.

Purchased goods and services

(7.8.1) Evaluation status

Select from:

☑ Relevant, not yet calculated

(7.8.5) Please explain

A very significant range of purchased goods and services for which it is not possible to accurately calculate indirect emissions, as there are no established emission calculation rates from different categories of goods (services) in the framework of national programs.

Capital goods

(7.8.1) Evaluation status

Select from:

☑ Not relevant, explanation provided

(7.8.5) Please explain

No data from manufacturers and no nationally established rates for calculating emissions from different categories of goods (services).

Fuel-and-energy-related activities (not included in Scope 1 or 2)

(7.8.1) Evaluation status

Select from:

☑ Relevant, calculated

(7.8.2) Emissions in reporting year (metric tons CO2e)

232483

(7.8.3) Emissions calculation methodology

Select all that apply

☑ Other, please specify :emissions are calculated in accordance with the GHG Protocol

(7.8.4) Percentage of emissions calculated using data obtained from suppliers or value chain partners

0

(7.8.5) Please explain

emissions are calculated using data on which our subsidiaries maintain records, not directly obtained from suppliers. Therefore, we have entered zero in column 4. emissions of this category were calculated in this reporting year for all our subsidiaries.

Upstream transportation and distribution

(7.8.1) Evaluation status

Select from:

☑ Not relevant, explanation provided

(7.8.5) Please explain

While GHG emissions from mobile sources are excluded under the regulatory requirements of the Kazakh and EU emissions trading systems, KMG suppliers also do not calculate GHG emissions from transportation

Waste generated in operations

(7.8.1) Evaluation status

Select from:

☑ Not relevant, explanation provided

(7.8.5) Please explain

All waste is transferred to contractors for further disposal or destruction. Contractors do not provide information on further actions. therefore, it is not possible to estimate emissions in this category in this reporting year.

Business travel

(7.8.1) Evaluation status

Select from:

☑ Relevant, calculated

(7.8.2) Emissions in reporting year (metric tons CO2e)

4518

(7.8.3) Emissions calculation methodology

Select all that apply

☑ Other, please specify :emissions are calculated in accordance with the GHG Protocol

(7.8.4) Percentage of emissions calculated using data obtained from suppliers or value chain partners

0

(7.8.5) Please explain

emissions are calculated using data on which our subsidiaries maintain records, not directly obtained from suppliers. Therefore, we have entered zero in column 4. emissions were calculated in this reporting year for all business travel by employees of our subsidiaries. Compared to 2023, emissions increased by 4 million tons of CO2 in 2024. In particular, there was an increase in emissions from the category of business trips (300 thousand tons of CO2) and the use of finished products (3.7 million tons of CO2).

Employee commuting

(7.8.1) Evaluation status

Select from:

☑ Relevant, calculated

(7.8.2) Emissions in reporting year (metric tons CO2e)

12599

(7.8.3) Emissions calculation methodology

Select all that apply

☑ Other, please specify :emissions are calculated in accordance with the GHG Protocol

(7.8.4) Percentage of emissions calculated using data obtained from suppliers or value chain partners

0

(7.8.5) Please explain

emissions are calculated using data on which our subsidiaries maintain records, not directly obtained from suppliers. Therefore, we have entered zero in column 4. Emissions from employee commuting (to work, at work sites, home) were calculated in this reporting year for all our subsidiaries

Upstream leased assets

(7.8.1) Evaluation status

Select from:

☑ Not relevant, explanation provided

(7.8.5) Please explain

The company does not lease or rent facilities/assets, so emissions are not calculated

Downstream transportation and distribution

(7.8.1) Evaluation status

Select from:

☑ Relevant, calculated

(7.8.2) Emissions in reporting year (metric tons CO2e)

322514

(7.8.3) Emissions calculation methodology

Select all that apply

☑ Other, please specify :emissions are calculated in accordance with the GHG Protocol

(7.8.4) Percentage of emissions calculated using data obtained from suppliers or value chain partners

0

(7.8.5) Please explain

emissions are calculated using data on which our subsidiaries maintain records, not directly obtained from suppliers. Therefore, we have entered zero in column 4. Emissions have been calculated along the routes where our products are delivered and transported

Processing of sold products

(7.8.1) Evaluation status

Select from:

☑ Not relevant, explanation provided

(7.8.5) Please explain

Company assumes that emissions associated with the processing of goods sold fall under the "use of goods sold" section of our primary Scope 3 emissions because the use of hydrocarbons involves processing. Emissions from goods processed by subsidiaries and affiliates of KMG are accounted in Scope 1.

Use of sold products

(7.8.1) Evaluation status

Select from:

☑ Relevant, calculated

(7.8.2) Emissions in reporting year (metric tons CO2e)

59245233

(7.8.3) Emissions calculation methodology

Select all that apply

☑ Other, please specify :emissions are calculated in accordance with the GHG Protocol

(7.8.4) Percentage of emissions calculated using data obtained from suppliers or value chain partners

0

(7.8.5) Please explain

emissions are calculated using data on which our subsidiaries maintain records, not directly obtained from suppliers. Therefore, we have entered zero in column 4. The company calculates emissions in this category annually. There is a decrease in CO2 emissions emissions compared to the previous year due to a decrease in

the use of sold products, as well as a change in the approach to calculating emissions for some subsidiaries. This approach eliminates double counting of emissions. Scope 3 emissions estimates do not include production data from refineries in Kazakhstan due to the nature of our business model in Kazakhstan. Compared to 2023, emissions increased by 4 million tons of CO2 in 2024. In particular, there was an increase in emissions from the category of business trips (300 thousand tons of CO2) and the use of finished products (3.7 million tons of CO2).

End of life treatment of sold products

(7.8.1) Evaluation status

Select from:

☑ Not relevant, explanation provided

(7.8.5) Please explain

No data is available on the disposal of products purchased from KMG by third-party customers. We have independently evaluated end-of-life emissions from our polymer products. These emissions are less than 4% of our Scope 3 gross emissions.

Downstream leased assets

(7.8.1) Evaluation status

Select from:

☑ Not relevant, explanation provided

(7.8.5) Please explain

The company does not lease or rent facilities/assets, so emissions are not calculated

Franchises

(7.8.1) Evaluation status

Select from:

☑ Not relevant, explanation provided

(7.8.5) Please explain

KMG assumes that emissions from the retail petrol station chain operated by franchisees are irrelevant compared to our Scope 3 emissions associated with "use of goods sold."

Investments

(7.8.1) Evaluation status

Select from:

☑ Not relevant, explanation provided

(7.8.5) Please explain

In terms of greenhouse gas emissions from those JVs in which the share of KMG investments is more than 50%, KMG reported 100% emissions in scope 1, 2, 3. We assume that the emissions associated with our investments have no operational significance less than than 50% compared to our main area 3 emissions associated with “use of goods sold”.

Other (upstream)

(7.8.1) Evaluation status

Select from:

☑ Not relevant, explanation provided

(7.8.5) Please explain

the company does not calculate emissions in other categories than those listed above in this section.

Other (downstream)

(7.8.1) Evaluation status

Select from:

☑ Not relevant, explanation provided

(7.8.5) Please explain

the company does not calculate emissions in other categories than those listed above in this section.
[Fixed row]

(7.8.1) Disclose or restate your Scope 3 emissions data for previous years.

Past year 1

(7.8.1.1) End date

12/30/2023

(7.8.1.2) Scope 3: Purchased goods and services (metric tons CO2e)

0

(7.8.1.3) Scope 3: Capital goods (metric tons CO2e)

0

(7.8.1.4) Scope 3: Fuel and energy-related activities (not included in Scopes 1 or 2) (metric tons CO2e)

273934

(7.8.1.5) Scope 3: Upstream transportation and distribution (metric tons CO2e)

0

(7.8.1.6) Scope 3: Waste generated in operations (metric tons CO2e)

0

(7.8.1.7) Scope 3: Business travel (metric tons CO2e)

2020

(7.8.1.8) Scope 3: Employee commuting (metric tons CO2e)

354655

(7.8.1.9) Scope 3: Upstream leased assets (metric tons CO2e)

0

(7.8.1.10) Scope 3: Downstream transportation and distribution (metric tons CO2e)

361501

(7.8.1.11) Scope 3: Processing of sold products (metric tons CO2e)

0

(7.8.1.12) Scope 3: Use of sold products (metric tons CO2e)

54751253

(7.8.1.13) Scope 3: End of life treatment of sold products (metric tons CO2e)

0

(7.8.1.14) Scope 3: Downstream leased assets (metric tons CO2e)

0

(7.8.1.15) Scope 3: Franchises (metric tons CO2e)

0

(7.8.1.16) Scope 3: Investments (metric tons CO2e)

0

(7.8.1.17) Scope 3: Other (upstream) (metric tons CO2e)

0

(7.8.1.18) Scope 3: Other (downstream) (metric tons CO2e)

0

(7.8.1.19) Comment

In 2023, KMG expanded its Scope 3 greenhouse gas emissions disclosure coverage. Since 2023, KMG has been disclosing 5 categories of emissions. Compared to 2023, emissions increased by 4 million tons of CO2 in 2024. In particular, there was an increase in emissions from the category of business travel (300 thousand tons of CO2) and the use of sold products (3.7 million tons of CO2).

Past year 2

(7.8.1.1) End date

12/30/2022

(7.8.1.2) Scope 3: Purchased goods and services (metric tons CO2e)

0

(7.8.1.3) Scope 3: Capital goods (metric tons CO2e)

0

(7.8.1.4) Scope 3: Fuel and energy-related activities (not included in Scopes 1 or 2) (metric tons CO2e)

0

(7.8.1.5) Scope 3: Upstream transportation and distribution (metric tons CO2e)

0

(7.8.1.6) Scope 3: Waste generated in operations (metric tons CO2e)

0

(7.8.1.7) Scope 3: Business travel (metric tons CO2e)

0

(7.8.1.8) Scope 3: Employee commuting (metric tons CO2e)

0

(7.8.1.9) Scope 3: Upstream leased assets (metric tons CO2e)

0

(7.8.1.10) Scope 3: Downstream transportation and distribution (metric tons CO2e)

0

(7.8.1.11) Scope 3: Processing of sold products (metric tons CO2e)

0

(7.8.1.12) Scope 3: Use of sold products (metric tons CO2e)

61759971

(7.8.1.13) Scope 3: End of life treatment of sold products (metric tons CO2e)

0

(7.8.1.14) Scope 3: Downstream leased assets (metric tons CO2e)

0

(7.8.1.15) Scope 3: Franchises (metric tons CO2e)

0

(7.8.1.16) Scope 3: Investments (metric tons CO2e)

0

(7.8.1.17) Scope 3: Other (upstream) (metric tons CO2e)

0

(7.8.1.18) Scope 3: Other (downstream) (metric tons CO2e)

0

(7.8.1.19) Comment

in scope 3 for 2022, only emissions in the category “use of sold products” were calculated

Past year 3

(7.8.1.1) End date

12/30/2021

(7.8.1.2) Scope 3: Purchased goods and services (metric tons CO2e)

0

(7.8.1.3) Scope 3: Capital goods (metric tons CO2e)

0

(7.8.1.4) Scope 3: Fuel and energy-related activities (not included in Scopes 1 or 2) (metric tons CO2e)

0

(7.8.1.5) Scope 3: Upstream transportation and distribution (metric tons CO2e)

0

(7.8.1.6) Scope 3: Waste generated in operations (metric tons CO2e)

0

(7.8.1.7) Scope 3: Business travel (metric tons CO2e)

0

(7.8.1.8) Scope 3: Employee commuting (metric tons CO2e)

0

(7.8.1.9) Scope 3: Upstream leased assets (metric tons CO2e)

0

(7.8.1.10) Scope 3: Downstream transportation and distribution (metric tons CO2e)

0

(7.8.1.11) Scope 3: Processing of sold products (metric tons CO2e)

0

(7.8.1.12) Scope 3: Use of sold products (metric tons CO2e)

61713184

(7.8.1.13) Scope 3: End of life treatment of sold products (metric tons CO2e)

0

(7.8.1.14) Scope 3: Downstream leased assets (metric tons CO2e)

0

(7.8.1.15) Scope 3: Franchises (metric tons CO2e)

0

(7.8.1.16) Scope 3: Investments (metric tons CO2e)

0

(7.8.1.17) Scope 3: Other (upstream) (metric tons CO2e)

0

(7.8.1.18) Scope 3: Other (downstream) (metric tons CO2e)

0

(7.8.1.19) Comment

in scope 3 for 2021, only emissions in the category “use of sold products” were calculated
[Fixed row]

(7.9) Indicate the verification/assurance status that applies to your reported emissions.

	Verification/assurance status
Scope 1	*Select from:* ☑ Third-party verification or assurance process in place
Scope 2 (location-based or market-based)	*Select from:* ☑ Third-party verification or assurance process in place
Scope 3	*Select from:* ☑ Third-party verification or assurance process in place

[Fixed row]

(7.9.1) Provide further details of the verification/assurance undertaken for your Scope 1 emissions, and attach the relevant statements.

Row 1

(7.9.1.1) Verification or assurance cycle in place

Select from:

☑ Annual process

(7.9.1.2) Status in the current reporting year

Select from:

☑ Complete

(7.9.1.3) Type of verification or assurance

Select from:

☑ Limited assurance

(7.9.1.4) Attach the statement

Verification report on sustainable report KMG SR'24_EY Report EN.pdf

(7.9.1.5) Page/section reference

This year, emissions were verified as part of the preparation of the annual sustainability report. the conclusion is attached in this section. You can also read it on pages 174 and 198 of our sustainability report posted on the company's official website at https://www.kmg.kz/upload/iblock/c49/ed33ku5b87ehmkym3b3v2e3zujk439jk/KMG_2024_OUR_2805.pdf

(7.9.1.6) Relevant standard

Select from:

☑ ISO14064-3

(7.9.1.7) Proportion of reported emissions verified (%)

100

[Add row]

(7.9.2) Provide further details of the verification/assurance undertaken for your Scope 2 emissions and attach the relevant statements.

Row 1

(7.9.2.1) Scope 2 approach

Select from:

☑ Scope 2 market-based

(7.9.2.2) Verification or assurance cycle in place

Select from:

☑ Annual process

(7.9.2.3) Status in the current reporting year

Select from:

☑ Complete

(7.9.2.4) Type of verification or assurance

Select from:

☑ Limited assurance

(7.9.2.5) Attach the statement

Verification report on sustainable report KMG SR'24_EY Report EN.pdf

(7.9.2.6) Page/ section reference

This year, emissions were verified as part of the preparation of the annual sustainability report. the conclusion is attached in this section. You can also read it on pages 174 and 198 of our sustainability report posted on the company's official website at https://www.kmg.kz/upload/iblock/c49/ed33ku5b87ehmkym3b3v2e3zujk439jk/KMG_2024_OUR_2805.pdf

(7.9.2.7) Relevant standard

Select from:

☑ ISO14064-3

(7.9.2.8) Proportion of reported emissions verified (%)

100

Row 2

(7.9.2.1) Scope 2 approach

Select from:

☑ Scope 2 location-based

(7.9.2.2) Verification or assurance cycle in place

Select from:

☑ Annual process

(7.9.2.3) Status in the current reporting year

Select from:

☑ Complete

(7.9.2.4) Type of verification or assurance

Select from:

☑ Limited assurance

(7.9.2.5) Attach the statement

Verification report on sustainable report KMG SR'24_EY Report EN.pdf

(7.9.2.6) Page/ section reference

This year, emissions were verified as part of the preparation of the annual sustainability report. the conclusion is attached in this section. You can also read it on pages 174 and 198 of our sustainability report posted on the company's official website at https://www.kmg.kz/upload/iblock/c49/ed33ku5b87ehmkym3b3v2e3zujk439jk/KMG_2024_OUR_2805.pdf

(7.9.2.7) Relevant standard

Select from:

☑ ISO14064-3

(7.9.2.8) Proportion of reported emissions verified (%)

100
[Add row]

(7.9.3) Provide further details of the verification/assurance undertaken for your Scope 3 emissions and attach the relevant statements.

Row 1

(7.9.3.1) Scope 3 category

Select all that apply

☑ Scope 3: Fuel and energy-related activities (not included in Scopes 1 or 2)

☑ Scope 3: Business travel

☑ Scope 3: Employee commuting

☑ Scope 3: Downstream transportation and distribution

☑ Scope 3: Use of sold products

(7.9.3.2) Verification or assurance cycle in place

Select from:

☑ Annual process

(7.9.3.3) Status in the current reporting year

Select from:

☑ Complete

(7.9.3.4) Type of verification or assurance

Select from:

☑ Limited assurance

(7.9.3.5) Attach the statement

Verification report on sustainable report KMG SR'24_EY Report EN.pdf

(7.9.3.6) Page/section reference

This year, emissions were verified as part of the preparation of the annual sustainability report. the conclusion is attached in this section. You can also read it on pages 174 and 198 of our sustainability report posted on the company's official website at https://www.kmg.kz/upload/iblock/c49/ed33ku5b87ehmkym3b3v2e3zujk439jk/KMG_2024_OUR_2805.pdf

(7.9.3.7) Relevant standard

Select from:

☑ ISO14064-3

(7.9.3.8) Proportion of reported emissions verified (%)

100
[Add row]

(7.10) How do your gross global emissions (Scope 1 and 2 combined) for the reporting year compare to those of the previous reporting year?

Select from:

☑ Increased

(7.10.1) Identify the reasons for any change in your gross global emissions (Scope 1 and 2 combined), and for each of them specify how your emissions compare to the previous year.

Change in renewable energy consumption

(7.10.1.1) Change in emissions (metric tons CO2e)

0

(7.10.1.2) Direction of change in emissions

Select from:

☑ No change

(7.10.1.3) Emissions value (percentage)

0

(7.10.1.4) Please explain calculation

-

Other emissions reduction activities

(7.10.1.1) Change in emissions (metric tons CO2e)

174900

(7.10.1.2) Direction of change in emissions

Select from:

☑ Decreased

(7.10.1.3) Emissions value (percentage)

1.5

(7.10.1.4) Please explain calculation

In 2024, the company achieved savings of 2,361,000 gigajoules of fuel and energy resources, which corresponds to an avoidance of 174.9 thousand tonnes of CO_2 emissions. This reduction represents approximately 1.5% of the company's total carbon footprint in 2024, when combined Scope 1 and 2 emissions amounted to about 12.4 million tonnes of CO_2.

Divestment

(7.10.1.1) Change in emissions (metric tons CO2e)

0

(7.10.1.2) Direction of change in emissions

Select from:

☑ No change

(7.10.1.3) Emissions value (percentage)

0

(7.10.1.4) Please explain calculation

-

Acquisitions

(7.10.1.1) Change in emissions (metric tons CO2e)

0

(7.10.1.2) Direction of change in emissions

Select from:

☑ No change

(7.10.1.3) Emissions value (percentage)

0

(7.10.1.4) Please explain calculation

-

Mergers

(7.10.1.1) Change in emissions (metric tons CO2e)

0

(7.10.1.2) Direction of change in emissions

Select from:

☑ No change

(7.10.1.3) Emissions value (percentage)

0

(7.10.1.4) Please explain calculation

-

Change in output

(7.10.1.1) Change in emissions (metric tons CO2e)

0

(7.10.1.2) Direction of change in emissions

Select from:

☑ No change

(7.10.1.3) Emissions value (percentage)

0

(7.10.1.4) Please explain calculation

-

Change in methodology

(7.10.1.1) Change in emissions (metric tons CO2e)

259844

(7.10.1.2) Direction of change in emissions

Select from:

☑ Increased

(7.10.1.3) Emissions value (percentage)

2

(7.10.1.4) Please explain calculation

Driven by a higher CO_2 emission factor at one upstream subsidiary, Scope 1 emissions grew by 259 thousand tonnes of CO_2, contributing nearly 2% of the company's overall carbon footprint in 2024. In absolute terms, the company's total Scope 1 and 2 emissions stood at 12.4 million tonnes of CO_2, highlighting the material impact of emission factor changes on consolidated results.

Change in boundary

(7.10.1.1) Change in emissions (metric tons CO2e)

486507

(7.10.1.2) Direction of change in emissions

Select from:

☑ Increased

(7.10.1.3) Emissions value (percentage)

4

(7.10.1.4) Please explain calculation

The inclusion of four newly established subsidiaries (3 upstrean + 1 downstream) contributed an additional 486 thousand tonnes of CO_2 to the company's Scope 1 and 2 emissions, driving a 4% increase in the overall carbon footprint for 2024. In total, Scope 1 and 2 emissions amounted to 12.4 million tonnes of CO_2. At the same time without the impact of the increased CO_2 emission factor at one subsidiary (+259 thousand tonnes) and the inclusion of four new subsidiaries in the reporting perimeter (+486 thousand tonnes), the Company would have demonstrated a reduction of 745 thousand tonnes of CO_2 in total emissions. This outcome highlights the effectiveness of the measures implemented to improve energy efficiency and reduce the carbon footprint.

Change in physical operating conditions

(7.10.1.1) Change in emissions (metric tons CO2e)

0

(7.10.1.2) Direction of change in emissions

Select from:

☑ No change

(7.10.1.3) Emissions value (percentage)

0

(7.10.1.4) Please explain calculation

-

Unidentified

(7.10.1.1) Change in emissions (metric tons CO2e)

0

(7.10.1.2) Direction of change in emissions

Select from:

☑ No change

(7.10.1.3) Emissions value (percentage)

0

(7.10.1.4) Please explain calculation

-

Other

(7.10.1.1) Change in emissions (metric tons CO2e)

6757

(7.10.1.2) Direction of change in emissions

Select from:

☑ Decreased

(7.10.1.3) Emissions value (percentage)

0.05

(7.10.1.4) Please explain calculation

In order to reduce indirect greenhouse gas emissions (Scope 2), JSC NC KazMunayGas acquired I-REC (International Renewable Energy Certificates) and extinguished them for 10.0 million kWh, which corresponds to the expected electricity consumption by KMG Corporate Center in 2024. Voluntary I-REC certificates confirm information on the fact of electricity generation from a renewable energy source (RES). [Fixed row]
[Fixed row]

(7.10.2) Are your emissions performance calculations in 7.10 and 7.10.1 based on a location-based Scope 2 emissions figure or a market-based Scope 2 emissions figure?

Select from:
☑ Location-based

(7.12) Are carbon dioxide emissions from biogenic carbon relevant to your organization?

Select from:
☑ No

(7.15) Does your organization break down its Scope 1 emissions by greenhouse gas type?

Select from:
☑ Yes

(7.15.1) Break down your total gross global Scope 1 emissions by greenhouse gas type and provide the source of each used global warming potential (GWP).

Row 1

(7.15.1.1) Greenhouse gas

Select from:
☑ CO2

(7.15.1.2) Scope 1 emissions (metric tons of CO2e)

1

(7.15.1.3) GWP Reference

Select from:

☑ IPCC Fifth Assessment Report (AR5 – 100 year)

Row 2

(7.15.1.1) Greenhouse gas

Select from:

☑ CH4

(7.15.1.2) Scope 1 emissions (metric tons of CO2e)

28

(7.15.1.3) GWP Reference

Select from:

☑ IPCC Fifth Assessment Report (AR5 – 100 year)

Row 3

(7.15.1.1) Greenhouse gas

Select from:

☑ N2O

(7.15.1.2) Scope 1 emissions (metric tons of CO2e)

265

(7.15.1.3) GWP Reference

Select from:

☑ IPCC Fifth Assessment Report (AR5 – 100 year)

[Add row]

(7.15.4) Break down your total gross global Scope 1 emissions from oil and gas value chain production activities by greenhouse gas type.

Row 1

(7.15.4.1) Emissions category

Select from:

☑ Combustion (excluding flaring)

(7.15.4.2) Value chain

Select all that apply

☑ Upstream

(7.15.4.3) Product

Select from:

☑ Unable to disaggregate

(7.15.4.4) Gross Scope 1 CO2 emissions (metric tons CO2)

2541274

(7.15.4.5) Gross Scope 1 methane emissions (metric tons CH4)

57

(7.15.4.6) Total gross Scope 1 emissions (metric tons CO2e)

2554196

(7.15.4.7) Comment

In 2024, the company's emissions grew by 304 thousand tonnes of CO_2, primarily as a result of a higher emission factor at one upstream subsidiary and the consolidation of three newly added upstream companies. These developments underscore the material impact that both methodological changes and portfolio expansion can have on the overall carbon footprint.

Row 2

(7.15.4.1) Emissions category

Select from:

☑ Flaring

(7.15.4.2) Value chain

Select all that apply

☑ Upstream

(7.15.4.3) Product

Select from:

☑ Unable to disaggregate

(7.15.4.4) Gross Scope 1 CO2 emissions (metric tons CO2)

88550

(7.15.4.5) Gross Scope 1 methane emissions (metric tons CH4)

1

(7.15.4.6) Total gross Scope 1 emissions (metric tons CO2e)

88676

(7.15.4.7) Comment

emissions increased by 9 thousand tons of CO2e due to one increase in emissions from one of the oupstream companies (due to an increase in the emission factor), as well as due to the addition of 3 new upstream companies.

Row 3

(7.15.4.1) Emissions category

Select from:

☑ Fugitives

(7.15.4.2) Value chain

Select all that apply

☑ Upstream

(7.15.4.3) Product

Select from:

☑ Unable to disaggregate

(7.15.4.4) Gross Scope 1 CO2 emissions (metric tons CO2)

8631

(7.15.4.5) Gross Scope 1 methane emissions (metric tons CH4)

47187

(7.15.4.6) Total gross Scope 1 emissions (metric tons CO2e)

1329882

(7.15.4.7) Comment

Emissions increased by 324 thousand tons of CO2e due to one increase in emissions from one of the oil production companies (due to an increase in the emission factor), as well as due to the addition of 3 new oil production companies.

Row 4

(7.15.4.1) Emissions category

Select from:

☑ Process (feedstock) emissions

(7.15.4.2) Value chain

Select all that apply

☑ Upstream

(7.15.4.3) Product

Select from:

☑ Unable to disaggregate

(7.15.4.4) Gross Scope 1 CO2 emissions (metric tons CO2)

25

(7.15.4.5) Gross Scope 1 methane emissions (metric tons CH4)

0

(7.15.4.6) Total gross Scope 1 emissions (metric tons CO2e)

25

(7.15.4.7) Comment

There were practically no emissions falling into this category this year.

Row 5

(7.15.4.1) Emissions category

Select from:

☑ Other (please specify) :other

(7.15.4.2) Value chain

Select all that apply

☑ Upstream

(7.15.4.3) Product

Select from:

☑ Unable to disaggregate

(7.15.4.4) Gross Scope 1 CO2 emissions (metric tons CO2)

32

(7.15.4.5) Gross Scope 1 methane emissions (metric tons CH4)

0

(7.15.4.6) Total gross Scope 1 emissions (metric tons CO2e)

3394

(7.15.4.7) Comment

emissions increased by 3 thousand tons of CO2e due to one increase in emissions from one of the oil production companies (due to an increase in the emission factor), as well as due to the addition of 3 new oil production companies.

Row 6

(7.15.4.1) Emissions category

Select from:

☑ Combustion (excluding flaring)

(7.15.4.2) Value chain

Select all that apply

☑ Midstream

(7.15.4.3) Product

Select from:

☑ Unable to disaggregate

(7.15.4.4) Gross Scope 1 CO2 emissions (metric tons CO2)

137258

(7.15.4.5) Gross Scope 1 methane emissions (metric tons CH4)

57

(7.15.4.6) Total gross Scope 1 emissions (metric tons CO2e)

138965

(7.15.4.7) Comment

emissions increased by 35 thousand tons of CO2e due to increased fuel combustion

Row 7

(7.15.4.1) Emissions category

Select from:

☑ Fugitives

(7.15.4.2) Value chain

Select all that apply

☑ Midstream

(7.15.4.3) Product

Select from:

☑ Unable to disaggregate

(7.15.4.4) Gross Scope 1 CO2 emissions (metric tons CO2)

3

(7.15.4.5) Gross Scope 1 methane emissions (metric tons CH4)

35

(7.15.4.6) Total gross Scope 1 emissions (metric tons CO2e)

974

(7.15.4.7) Comment

emissions from fugitive emissions decreased by 655 tons of CO2e

Row 8

(7.15.4.1) Emissions category

Select from:

☑ Combustion (excluding flaring)

(7.15.4.2) Value chain

Select all that apply

☑ Downstream

(7.15.4.3) Product

Select from:

☑ Unable to disaggregate

(7.15.4.4) Gross Scope 1 CO2 emissions (metric tons CO2)

3769787

(7.15.4.5) Gross Scope 1 methane emissions (metric tons CH4)

25

(7.15.4.6) Total gross Scope 1 emissions (metric tons CO2e)

3776161

(7.15.4.7) Comment

Emissions in this category decreased by 123 thousand tons of CO2e, and overall emissions in this sector decreased.

Row 9

(7.15.4.1) Emissions category

Select from:

☑ Flaring

(7.15.4.2) Value chain

Select all that apply

☑ Downstream

(7.15.4.3) Product

Select from:

☑ Unable to disaggregate

(7.15.4.4) Gross Scope 1 CO2 emissions (metric tons CO2)

52380

(7.15.4.5) Gross Scope 1 methane emissions (metric tons CH4)

0.2

(7.15.4.6) Total gross Scope 1 emissions (metric tons CO2e)

52385

(7.15.4.7) Comment

flare emissions decreased by 7 thousand tons of CO2e. Overall, emissions have decreased in this sector.

Row 10

(7.15.4.1) Emissions category

Select from:

☑ Fugitives

(7.15.4.2) Value chain

Select all that apply

☑ Downstream

(7.15.4.3) Product

Select from:

☑ Unable to disaggregate

(7.15.4.4) Gross Scope 1 CO2 emissions (metric tons CO2)

24

(7.15.4.5) Gross Scope 1 methane emissions (metric tons CH4)

417

(7.15.4.6) Total gross Scope 1 emissions (metric tons CO2e)

11689

(7.15.4.7) Comment

fugitive emissions decreased by 1,000 tons of Co2. Overall, emissions have decreased in this sector.

Row 11

(7.15.4.1) Emissions category

Select from:

☑ Process (feedstock) emissions

(7.15.4.2) Value chain

Select all that apply

☑ Downstream

(7.15.4.3) Product

Select from:

☑ Unable to disaggregate

(7.15.4.4) Gross Scope 1 CO2 emissions (metric tons CO2)

1100989

(7.15.4.5) Gross Scope 1 methane emissions (metric tons CH4)

5

(7.15.4.6) Total gross Scope 1 emissions (metric tons CO2e)

1102360

(7.15.4.7) Comment

в этой категории технологические выбросы увеличились на 47 тыс тонн CO2e
[Add row]

(7.16) Break down your total gross global Scope 1 and 2 emissions by country/area.

	Scope 1 emissions (metric tons CO2e)	Scope 2, location-based (metric tons CO2e)	Scope 2, market-based (metric tons CO2e)
Georgia	*24501*	*1504*	*1504*
Kazakhstan	*8345477*	*3126632*	*3126632*
Romania	*688728*	*290480*	*215686*

[Fixed row]

(7.17) Indicate which gross global Scope 1 emissions breakdowns you are able to provide.

Select all that apply

☑ By activity

(7.17.3) Break down your total gross global Scope 1 emissions by business activity.

	Activity	Scope 1 emissions (metric tons CO2e)
Row 1	*Oil and gas refining activities (downstream)*	*4942594*
Row 2	*Oil and gas exploration and production activities (upstream)*	*3976173*
Row 3	*Oil and gas transportation activities (midstream)*	*139940*

[Add row]

(7.19) Break down your organization's total gross global Scope 1 emissions by sector production activity in metric tons CO2e.

Oil and gas production activities (upstream)

(7.19.1) Gross Scope 1 emissions, metric tons CO2e

3976173

(7.19.3) Comment

In 2024, the company's emissions rose by 628 thousand tonnes of CO_2e, driven primarily by two factors: the upward revision of the CO_2 emission factor at one upstream subsidiary and the consolidation of three new upstream assets. Furthermore, increases in methane emissions across certain oil production companies contributed materially to the overall carbon footprint, reflecting methane's disproportionately high climate impact compared with CO_2.

Oil and gas production activities (midstream)

(7.19.1) Gross Scope 1 emissions, metric tons CO2e

139940

(7.19.3) Comment

emissions in this sector increased by 35 thousand CO2e due to an increase in emissions at one of the oil pumping stations due to an increase in the volume of fuel burned

Oil and gas production activities (downstream)

(7.19.1) Gross Scope 1 emissions, metric tons CO2e

4942594

(7.19.3) Comment

Sectoral emissions decreased in 2024, driven by reductions across all four refineries. Notably, despite the integration of a new polypropylene production plant, overall emissions still fell by 85 thousand tonnes compared to last year, underscoring the effectiveness of ongoing efficiency measures.
[Fixed row]

(7.20) Indicate which gross global Scope 2 emissions breakdowns you are able to provide.

Select all that apply
☑ By activity

(7.20.3) Break down your total gross global Scope 2 emissions by business activity.

	Activity	Scope 2, location-based (metric tons CO2e)	Scope 2, market-based (metric tons CO2e)
Row 1	*Oil and gas refining activities (downstream)*	*1972522*	*1897728*
Row 2	*Oil and gas exploration and production activities (upstream)*	*1232191*	*1232191*
Row 3	*Oil and gas transportation activities (midstream)*	*213903*	*213903*

[Add row]

(7.21) Break down your organization’s total gross global Scope 2 emissions by sector production activity in metric tons CO2e.

Oil and gas production activities (upstream)

(7.21.1) Scope 2, location-based, metric tons CO2e

1232191

(7.21.2) Scope 2, market-based (if applicable), metric tons CO2e

1232191

(7.21.3) Comment

Overall, Scope 2 emissions declined compared to 2023. This reduction is linked to the structure of Kazakhstan’s electricity market, where a single operator consolidates energy from various producers and delivers a unified supply to consumers. Each year, CO_2 emission factors are recalculated to reflect the evolving generation mix, including the shares of coal, gas, and renewable energy. In 2024, the share of gas-fired and renewable generation increased, resulting in lower emission factors. Consequently, emissions in this sector fell by 139 thousand tonnes of CO_2e.

Oil and gas production activities (midstream)

(7.21.1) Scope 2, location-based, metric tons CO2e

213903

(7.21.2) Scope 2, market-based (if applicable), metric tons CO2e

213903

(7.21.3) Comment

Overall, Scope 2 emissions declined compared to 2023. This reduction is linked to the structure of Kazakhstan’s electricity market, where a single operator consolidates energy from various producers and delivers a unified supply to consumers. Each year, CO_2 emission factors are recalculated to reflect the evolving

generation mix, including the shares of coal, gas, and renewable energy. In 2024, the share of gas-fired and renewable generation increased, resulting in lower emission factors. Consequently, emissions in this sector fell by 25 thousand tonnes of CO_2e

Oil and gas production activities (downstream)

(7.21.1) Scope 2, location-based, metric tons CO2e

1972522

(7.21.2) Scope 2, market-based (if applicable), metric tons CO2e

1897728

(7.21.3) Comment

in this sector, emissions increased due to the addition of a new polypropylene processing plant (by 126 thousand according to the location method, and by 134 thousand according to the market method)
[Fixed row]

(7.22) Break down your gross Scope 1 and Scope 2 emissions between your consolidated accounting group and other entities included in your response.

Consolidated accounting group

(7.22.1) Scope 1 emissions (metric tons CO2e)

9058706

(7.22.2) Scope 2, location-based emissions (metric tons CO2e)

3418616

(7.22.3) Scope 2, market-based emissions (metric tons CO2e)

3343822

(7.22.4) Please explain

In this section, emissions are presented for the group of companies of NC KazMunayGas JSC, including the corporate center and subsidiaries. Subsidiaries include only operated assets with 50% or more ownership. This approach is applied to all emissions reported in this questionnaire.

All other entities

(7.22.1) Scope 1 emissions (metric tons CO2e)

0

(7.22.2) Scope 2, location-based emissions (metric tons CO2e)

0

(7.22.3) Scope 2, market-based emissions (metric tons CO2e)

0

(7.22.4) Please explain

emissions of all non-operated assets of NC KazMunayGas JSC group of companies with ownership interest below 50% are not included in this questionnaire. [Fixed row]

(7.23) Is your organization able to break down your emissions data for any of the subsidiaries included in your CDP response?

Select from:

☑ Yes

(7.23.1) Break down your gross Scope 1 and Scope 2 emissions by subsidiary.

Row 1

(7.23.1.1) Subsidiary name

Pavlodar Refinery

(7.23.1.2) Primary activity

Select from:

☑ Oil & gas refining

(7.23.1.3) Select the unique identifier you are able to provide for this subsidiary

Select all that apply

☑ No unique identifier

(7.23.1.12) Scope 1 emissions (metric tons CO2e)

965744

(7.23.1.13) Scope 2, location-based emissions (metric tons CO2e)

767348

(7.23.1.14) Scope 2, market-based emissions (metric tons CO2e)

767348

(7.23.1.15) Comment

a refinery (Pavlodar region)

Row 2

(7.23.1.1) Subsidiary name

Kazakhoil Aktobe

(7.23.1.2) Primary activity

Select from:

☑ Oil & gas extraction

(7.23.1.3) Select the unique identifier you are able to provide for this subsidiary

Select all that apply

☑ No unique identifier

(7.23.1.12) Scope 1 emissions (metric tons CO2e)

180030

(7.23.1.13) Scope 2, location-based emissions (metric tons CO2e)

60482

(7.23.1.14) Scope 2, market-based emissions (metric tons CO2e)

60482

(7.23.1.15) Comment

A company engaged in the extraction of hydrocarbon (KOA)

Row 3

(7.23.1.1) Subsidiary name

Atyrau Refinery

(7.23.1.2) Primary activity

Select from:

☑ Oil & gas refining

(7.23.1.3) Select the unique identifier you are able to provide for this subsidiary

Select all that apply

☑ No unique identifier

(7.23.1.12) Scope 1 emissions (metric tons CO2e)

1509219

(7.23.1.13) Scope 2, location-based emissions (metric tons CO2e)

437479

(7.23.1.14) Scope 2, market-based emissions (metric tons CO2e)

437479

(7.23.1.15) Comment

a refinery (Atyrau region)

Row 4

(7.23.1.1) Subsidiary name

Kazakh Gas Processing Plant

(7.23.1.2) Primary activity

Select from:

☑ Oil & gas refining

(7.23.1.3) Select the unique identifier you are able to provide for this subsidiary

Select all that apply

☑ No unique identifier

(7.23.1.12) Scope 1 emissions (metric tons CO2e)

127224

(7.23.1.13) Scope 2, location-based emissions (metric tons CO2e)

135821

(7.23.1.14) Scope 2, market-based emissions (metric tons CO2e)

135821

(7.23.1.15) Comment

Gas Processing plant

Row 5

(7.23.1.1) Subsidiary name

Ozenmunaigas

(7.23.1.2) Primary activity

Select from:
☑ Oil & gas extraction

(7.23.1.3) Select the unique identifier you are able to provide for this subsidiary

Select all that apply
☑ No unique identifier

(7.23.1.12) Scope 1 emissions (metric tons CO2e)

1060485

(7.23.1.13) Scope 2, location-based emissions (metric tons CO2e)

506009

(7.23.1.14) Scope 2, market-based emissions (metric tons CO2e)

506009

(7.23.1.15) Comment

A company engaged in the extraction of hydrocarbon (OMG)

Row 6

(7.23.1.1) Subsidiary name

Petromidia Refinery

(7.23.1.2) Primary activity

Select from:

☑ Oil & gas refining

(7.23.1.3) Select the unique identifier you are able to provide for this subsidiary

Select all that apply

☑ No unique identifier

(7.23.1.12) Scope 1 emissions (metric tons CO2e)

651181

(7.23.1.13) Scope 2, location-based emissions (metric tons CO2e)

286666

(7.23.1.14) Scope 2, market-based emissions (metric tons CO2e)

213747

(7.23.1.15) Comment

oil refinery in Romania (Rompetrol)

Row 7

(7.23.1.1) Subsidiary name

Vega Refinery

(7.23.1.2) Primary activity

Select from:
☑ Oil & gas refining

(7.23.1.3) Select the unique identifier you are able to provide for this subsidiary

Select all that apply
☑ No unique identifier

(7.23.1.12) Scope 1 emissions (metric tons CO2e)

37547

(7.23.1.13) Scope 2, location-based emissions (metric tons CO2e)

3815

(7.23.1.14) Scope 2, market-based emissions (metric tons CO2e)

1940

(7.23.1.15) Comment

oil refinery in Romania (Vega)

Row 8

(7.23.1.1) Subsidiary name

Ozenmunai services

(7.23.1.2) Primary activity

Select from:

☑ Other professional services

(7.23.1.3) Select the unique identifier you are able to provide for this subsidiary

Select all that apply

☑ No unique identifier

(7.23.1.12) Scope 1 emissions (metric tons CO2e)

3634

(7.23.1.13) Scope 2, location-based emissions (metric tons CO2e)

779

(7.23.1.14) Scope 2, market-based emissions (metric tons CO2e)

779

(7.23.1.15) Comment

The company providing service services (OMS)

Row 9

(7.23.1.1) Subsidiary name

KazTransOil

(7.23.1.2) Primary activity

Select from:

☑ Oil & gas pipelines & storage

(7.23.1.3) Select the unique identifier you are able to provide for this subsidiary

Select all that apply

☑ No unique identifier

(7.23.1.12) Scope 1 emissions (metric tons CO2e)

115439

(7.23.1.13) Scope 2, location-based emissions (metric tons CO2e)

212399

(7.23.1.14) Scope 2, market-based emissions (metric tons CO2e)

212399

(7.23.1.15) Comment

Oil transportation company (KTO)

Row 10

(7.23.1.1) Subsidiary name

Caspi bitum

(7.23.1.2) Primary activity

Select from:

☑ Oil & gas refining

(7.23.1.3) Select the unique identifier you are able to provide for this subsidiary

Select all that apply

☑ No unique identifier

(7.23.1.12) Scope 1 emissions (metric tons CO2e)

32360

(7.23.1.13) Scope 2, location-based emissions (metric tons CO2e)

12814

(7.23.1.14) Scope 2, market-based emissions (metric tons CO2e)

12814

(7.23.1.15) Comment

Bitumen Production Plant

Row 11

(7.23.1.1) Subsidiary name

Oil Constraction Company

(7.23.1.2) Primary activity

Select from:

☑ Other professional services

(7.23.1.3) Select the unique identifier you are able to provide for this subsidiary

Select all that apply

☑ No unique identifier

(7.23.1.12) Scope 1 emissions (metric tons CO2e)

625

(7.23.1.13) Scope 2, location-based emissions (metric tons CO2e)

1481

(7.23.1.14) Scope 2, market-based emissions (metric tons CO2e)

1481

(7.23.1.15) Comment

The company providing service (OCC)

Row 12

(7.23.1.1) Subsidiary name

Karazhanbasmunai

(7.23.1.2) Primary activity

Select from:

☑ Oil & gas extraction

(7.23.1.3) Select the unique identifier you are able to provide for this subsidiary

Select all that apply

☑ No unique identifier

(7.23.1.12) Scope 1 emissions (metric tons CO2e)

954799

(7.23.1.13) Scope 2, location-based emissions (metric tons CO2e)

168158

(7.23.1.14) Scope 2, market-based emissions (metric tons CO2e)

168158

(7.23.1.15) Comment

A company engaged in the extraction of hydrocarbon (KBM)

Row 13

(7.23.1.1) Subsidiary name

Batumi Oil Terminal

(7.23.1.2) Primary activity

Select from:

☑ Oil & gas pipelines & storage

(7.23.1.3) Select the unique identifier you are able to provide for this subsidiary

Select all that apply

☑ No unique identifier

(7.23.1.12) Scope 1 emissions (metric tons CO2e)

24501

(7.23.1.13) Scope 2, location-based emissions (metric tons CO2e)

1504

(7.23.1.14) Scope 2, market-based emissions (metric tons CO2e)

1504

(7.23.1.15) Comment

A company that provides services for transshipment, transportation, forwarding, purchase and sale of oil, petroleum products and gas, as well as products of their processing. (BNT)

Row 14

(7.23.1.1) Subsidiary name

PetroKazakhstan Oil Products

(7.23.1.2) Primary activity

Select from:

☑ Oil & gas refining

(7.23.1.3) Select the unique identifier you are able to provide for this subsidiary

Select all that apply

☑ No unique identifier

(7.23.1.12) Scope 1 emissions (metric tons CO2e)

1357263

(7.23.1.13) Scope 2, location-based emissions (metric tons CO2e)

225192

(7.23.1.14) Scope 2, market-based emissions (metric tons CO2e)

225192

(7.23.1.15) Comment

a refinery (Shymkent region)

Row 15

(7.23.1.1) Subsidiary name

Embamunaigas

(7.23.1.2) Primary activity

Select from:

☑ Oil & gas extraction

(7.23.1.3) Select the unique identifier you are able to provide for this subsidiary

Select all that apply

☑ No unique identifier

(7.23.1.12) Scope 1 emissions (metric tons CO2e)

383951

(7.23.1.13) Scope 2, location-based emissions (metric tons CO2e)

98861

(7.23.1.14) Scope 2, market-based emissions (metric tons CO2e)

98861

(7.23.1.15) Comment

A company engaged in the extraction of hydrocarbon (EMG)

Row 16

(7.23.1.1) Subsidiary name

JV Kazgermunai

(7.23.1.2) Primary activity

Select from:
☑ Oil & gas extraction

(7.23.1.3) Select the unique identifier you are able to provide for this subsidiary

Select all that apply
☑ No unique identifier

(7.23.1.12) Scope 1 emissions (metric tons CO2e)

91983

(7.23.1.13) Scope 2, location-based emissions (metric tons CO2e)

151016

(7.23.1.14) Scope 2, market-based emissions (metric tons CO2e)

151016

(7.23.1.15) Comment

A company engaged in the extraction of hydrocarbon (KGM)

Row 17

(7.23.1.1) Subsidiary name

KazmunayGaz corporate center

(7.23.1.2) Primary activity

Select from:

☑ Asset managers

(7.23.1.3) Select the unique identifier you are able to provide for this subsidiary

Select all that apply

☑ No unique identifier

(7.23.1.12) Scope 1 emissions (metric tons CO2e)

0

(7.23.1.13) Scope 2, location-based emissions (metric tons CO2e)

6757

(7.23.1.14) Scope 2, market-based emissions (metric tons CO2e)

6757

(7.23.1.15) Comment

Corporate Center of JSC NC KazMunayGas. A business center located in Astana.

Row 18

(7.23.1.1) Subsidiary name

Mangistaumunaigaz

(7.23.1.2) Primary activity

Select from:

☑ Oil & gas extraction

(7.23.1.3) Select the unique identifier you are able to provide for this subsidiary

Select all that apply

☑ No unique identifier

(7.23.1.12) Scope 1 emissions (metric tons CO2e)

1114553

(7.23.1.13) Scope 2, location-based emissions (metric tons CO2e)

219762

(7.23.1.14) Scope 2, market-based emissions (metric tons CO2e)

219761

(7.23.1.15) Comment

A company engaged in the extraction of hydrocarbon (MMG)

Row 19

(7.23.1.1) Subsidiary name

Kazakhturkmunay

(7.23.1.2) Primary activity

Select from:

☑ Oil & gas extraction

(7.23.1.3) Select the unique identifier you are able to provide for this subsidiary

Select all that apply

☑ No unique identifier

(7.23.1.12) Scope 1 emissions (metric tons CO2e)

67961

(7.23.1.13) Scope 2, location-based emissions (metric tons CO2e)

437

(7.23.1.14) Scope 2, market-based emissions (metric tons CO2e)

435

(7.23.1.15) Comment

A company engaged in the extraction of hydrocarbon (KTM)

Row 20

(7.23.1.1) Subsidiary name

Oil Services Company

(7.23.1.2) Primary activity

Select from:

☑ Other professional services

(7.23.1.3) Select the unique identifier you are able to provide for this subsidiary

Select all that apply

☑ No unique identifier

(7.23.1.12) Scope 1 emissions (metric tons CO2e)

625

(7.23.1.13) Scope 2, location-based emissions (metric tons CO2e)

11679

(7.23.1.14) Scope 2, market-based emissions (metric tons CO2e)

11679

(7.23.1.15) Comment

The company providing service (OSC)

Row 21

(7.23.1.1) Subsidiary name

LLP "Urihtau Operating"

(7.23.1.2) Primary activity

Select from:

☑ Oil & gas extraction

(7.23.1.3) Select the unique identifier you are able to provide for this subsidiary

Select all that apply

☑ No unique identifier

(7.23.1.12) Scope 1 emissions (metric tons CO2e)

4712

(7.23.1.13) Scope 2, location-based emissions (metric tons CO2e)

2809

(7.23.1.14) Scope 2, market-based emissions (metric tons CO2e)

2809

(7.23.1.15) Comment

A company engaged in the extraction of hydrocarbon (UO)

Row 22

(7.23.1.1) Subsidiary name

LLP "Ural oil and Gas"

(7.23.1.2) Primary activity

Select from:
☑ Oil & gas extraction

(7.23.1.3) Select the unique identifier you are able to provide for this subsidiary

Select all that apply
☑ No unique identifier

(7.23.1.12) Scope 1 emissions (metric tons CO2e)

2017

(7.23.1.13) Scope 2, location-based emissions (metric tons CO2e)

18

(7.23.1.14) Scope 2, market-based emissions (metric tons CO2e)

18

(7.23.1.15) Comment

A company engaged in the extraction of hydrocarbon (UOG)

Row 23

(7.23.1.1) Subsidiary name

Dunga Operating Gmbh

(7.23.1.2) Primary activity

Select from:

☑ Oil & gas extraction

(7.23.1.3) Select the unique identifier you are able to provide for this subsidiary

Select all that apply

☑ No unique identifier

(7.23.1.12) Scope 1 emissions (metric tons CO2e)

59194

(7.23.1.13) Scope 2, location-based emissions (metric tons CO2e)

85

(7.23.1.14) Scope 2, market-based emissions (metric tons CO2e)

85

(7.23.1.15) Comment

A company engaged in the extraction of hydrocarbon (Dunga)

Row 24

(7.23.1.1) Subsidiary name

LLP "Kazakhstan Petrochemical Indusrties"

(7.23.1.2) Primary activity

Select from:
☑ Other base chemicals

(7.23.1.3) Select the unique identifier you are able to provide for this subsidiary

Select all that apply
☑ No unique identifier

(7.23.1.12) Scope 1 emissions (metric tons CO2e)

262056

(7.23.1.13) Scope 2, location-based emissions (metric tons CO2e)

103388

(7.23.1.14) Scope 2, market-based emissions (metric tons CO2e)

103388

(7.23.1.15) Comment

polypropylene production plant (KPI)
[Add row]

(7.24) Report your methane emissions as percentages of natural gas and hydrocarbon production or throughput.

Row 1

(7.24.1) Oil and gas business division

Select all that apply
☑ Upstream

(7.24.2) Estimated total methane emitted expressed as % of natural gas production or throughput at given division

1.74

(7.24.3) Estimated total methane emitted expressed as % of total hydrocarbon production or throughput at given division

0.22

(7.24.4) Indicate whether your methane emissions figure is based on observational data

Select from:
☑ Estimated or modelled data only

(7.24.5) Details of methodology

The indicator increased compared to the previous year, due to an increase in methane emissions from one of the production companies, and taking into account the inclusion of 3 new production companies

Row 2

(7.24.1) Oil and gas business division

Select all that apply

☑ Downstream

(7.24.2) Estimated total methane emitted expressed as % of natural gas production or throughput at given division

0.06

(7.24.3) Estimated total methane emitted expressed as % of total hydrocarbon production or throughput at given division

0

(7.24.4) Indicate whether your methane emissions figure is based on observational data

Select from:

☑ Estimated or modelled data only

(7.24.5) Details of methodology

The presented values are obtained by dividing the total methane emissions of our downstream companies by the volume of gas processing (KazGPP) and the total volume of hydrocarbon processing, respectively (all 6 refineries + GPP). To calculate the indicator, the volumes of methane emissions and processing were given in metric tons. In 2024, the indicator remained at the same level.

Row 3

(7.24.1) Oil and gas business division

Select all that apply

☑ Midstream

(7.24.2) Estimated total methane emitted expressed as % of natural gas production or throughput at given division

0

(7.24.3) Estimated total methane emitted expressed as % of total hydrocarbon production or throughput at given division

0

(7.24.4) Indicate whether your methane emissions figure is based on observational data

Select from:

☑ Estimated or modelled data only

(7.24.5) Details of methodology

gas transportation is absent due to the withdrawal of gas transportation assets from the company's structure in 2021. Methane emissions to oil transportation as a percentage are not presentable (less than 0).
[Add row]

(7.26) Allocate your emissions to your customers listed below according to the goods or services you have sold them in this reporting period.

Row 1

(7.26.1) Requesting member

Select from:

(7.26.2) Scope of emissions

Select from:

☑ Scope 3

(7.26.3) Scope 3 category(ies)

Select all that apply

☑ Category 11: Use of sold products

(7.26.4) Allocation level

Select from:

☑ Commodity

(7.26.6) Allocation method

Select from:

☑ Allocation not necessary due to type of primary data available

(7.26.9) Emissions in metric tonnes of CO2e

0.0064

(7.26.10) Uncertainty (±%)

100

(7.26.11) Major sources of emissions

EF = 6.41061 kg CO2e/ton polypropylene (DEFRA data base in order to calculate CO2 emission imposed by EFRAG standards) KMG International N.V. have a cooperation with Greiner Packaging SRL, which is located in Romania and is part of the Greiner AG group. In 2024, they purchased 2,855 tons of polypropylene. In line with our strategy to reduce the carbon footprint of our products, we believe that over time, Greiner's scope 3 (category 1) carbon footprint will also be reduced within the supply chain.

(7.26.12) Allocation verified by a third party?

Select from:

☑ No

(7.26.13) Please explain how you have identified the GHG source, including major limitations to this process and assumptions made

EF = 6.41061 kg CO2e/ton polypropylene (DEFRA data base in order to calculate CO2 emission imposed by EFRAG standards)

(7.26.14) Where published information has been used, please provide a reference

EF = 6.41061 kg CO2e/ton polypropylene (DEFRA data base in order to calculate CO2 emission imposed by EFRAG standards)
[Add row]

(7.27) What are the challenges in allocating emissions to different customers, and what would help you to overcome these challenges?

Row 1

(7.27.1) Allocation challenges

Select from:

☑ Customer base is too large and diverse to accurately track emissions to the customer level

(7.27.2) Please explain what would help you overcome these challenges

digital technologies and AI will be useful
[Add row]

(7.28) Do you plan to develop your capabilities to allocate emissions to your customers in the future?

(7.28.1) Do you plan to develop your capabilities to allocate emissions to your customers in the future?

Select from:

☑ Yes

(7.28.2) Describe how you plan to develop your capabilities

We have conducted an estimation of five categories out of a total of fifteen within Scope 3. Certain remaining categories have been excluded, as their emissions are accounted for in our direct emissions Scope 1, such as those resulting from transportation and processing activities. Furthermore, we have approached the estimation of category 11, "Use of Products," with a conservative methodology. This approach is based on the assumption that all oil produced was converted into combustible petroleum products and utilized during the reporting year. Consequently, we anticipate that emissions from all other categories, even if fully accounted for, will not be

significant in comparison to category 11. Nevertheless, we are committed to enhancing the quality of data related to the five Scope 3 categories that we currently monitor.
[Fixed row]

(7.29) What percentage of your total operational spend in the reporting year was on energy?

Select from:
☑ More than 0% but less than or equal to 5%

(7.30) Select which energy-related activities your organization has undertaken.

	Indicate whether your organization undertook this energy-related activity in the reporting year
Consumption of fuel (excluding feedstocks)	*Select from:* ☑ Yes
Consumption of purchased or acquired electricity	*Select from:* ☑ Yes
Consumption of purchased or acquired heat	*Select from:* ☑ Yes
Consumption of purchased or acquired steam	*Select from:* ☑ Yes
Consumption of purchased or acquired cooling	*Select from:* ☑ No
Generation of electricity, heat, steam, or cooling	*Select from:* ☑ Yes

[Fixed row]

(7.30.1) Report your organization’s energy consumption totals (excluding feedstocks) in MWh.

Consumption of fuel (excluding feedstock)

(7.30.1.1) Heating value

Select from:

☑ LHV (lower heating value)

(7.30.1.2) MWh from renewable sources

0

(7.30.1.3) MWh from non-renewable sources

30229433.8

(7.30.1.4) Total (renewable + non-renewable) MWh

30229433.80

Consumption of purchased or acquired electricity

(7.30.1.1) Heating value

Select from:

☑ LHV (lower heating value)

(7.30.1.2) MWh from renewable sources

169423.05

(7.30.1.3) MWh from non-renewable sources

4258696.23

(7.30.1.4) Total (renewable + non-renewable) MWh

4428119.28

Consumption of purchased or acquired heat

(7.30.1.1) Heating value

Select from:
☑ LHV (lower heating value)

(7.30.1.2) MWh from renewable sources

0

(7.30.1.3) MWh from non-renewable sources

117896.45

(7.30.1.4) Total (renewable + non-renewable) MWh

117896.45

Consumption of purchased or acquired steam

(7.30.1.1) Heating value

Select from:
☑ LHV (lower heating value)

(7.30.1.2) MWh from renewable sources

0

(7.30.1.3) MWh from non-renewable sources

1612919.83

(7.30.1.4) Total (renewable + non-renewable) MWh

1612919.83

Consumption of self-generated non-fuel renewable energy

(7.30.1.1) Heating value

Select from:
☑ LHV (lower heating value)

(7.30.1.2) MWh from renewable sources

149.45

(7.30.1.4) Total (renewable + non-renewable) MWh

149.45

Total energy consumption

(7.30.1.1) Heating value

Select from:
☑ LHV (lower heating value)

(7.30.1.2) MWh from renewable sources

169572.5

(7.30.1.3) MWh from non-renewable sources

36218946.3

(7.30.1.4) Total (renewable + non-renewable) MWh

36388518.80
[Fixed row]

(7.30.6) Select the applications of your organization’s consumption of fuel.

	Indicate whether your organization undertakes this fuel application
Consumption of fuel for the generation of electricity	*Select from:* ☑ Yes
Consumption of fuel for the generation of heat	*Select from:* ☑ Yes
Consumption of fuel for the generation of steam	*Select from:* ☑ Yes
Consumption of fuel for the generation of cooling	*Select from:* ☑ No
Consumption of fuel for co-generation or tri-generation	*Select from:* ☑ Yes

[Fixed row]

(7.30.7) State how much fuel in MWh your organization has consumed (excluding feedstocks) by fuel type.

Sustainable biomass

(7.30.7.1) Heating value

Select from:

☑ Unable to confirm heating value

(7.30.7.2) Total fuel MWh consumed by the organization

0

(7.30.7.3) MWh fuel consumed for self-generation of electricity

0

(7.30.7.4) MWh fuel consumed for self-generation of heat

0

(7.30.7.5) MWh fuel consumed for self-generation of steam

0

(7.30.7.7) MWh fuel consumed for self- cogeneration or self-trigeneration

0

(7.30.7.8) Comment

KMG does not consume sustainable biomass

Other biomass

(7.30.7.1) Heating value

Select from:
☑ Unable to confirm heating value

(7.30.7.2) Total fuel MWh consumed by the organization

0

(7.30.7.3) MWh fuel consumed for self-generation of electricity

0

(7.30.7.4) MWh fuel consumed for self-generation of heat

0

(7.30.7.5) MWh fuel consumed for self-generation of steam

0

(7.30.7.7) MWh fuel consumed for self- cogeneration or self-trigeneration

0

(7.30.7.8) Comment

KMG does not consume any biomass

Other renewable fuels (e.g. renewable hydrogen)

(7.30.7.1) Heating value

Select from:

☑ Unable to confirm heating value

(7.30.7.2) Total fuel MWh consumed by the organization

0

(7.30.7.3) MWh fuel consumed for self-generation of electricity

0

(7.30.7.4) MWh fuel consumed for self-generation of heat

0

(7.30.7.5) MWh fuel consumed for self-generation of steam

0

(7.30.7.7) MWh fuel consumed for self- cogeneration or self-trigeneration

0

(7.30.7.8) Comment

KMG does not consume hydrogen

Coal

(7.30.7.1) Heating value

Select from:

☑ Unable to confirm heating value

(7.30.7.2) Total fuel MWh consumed by the organization

0

(7.30.7.3) MWh fuel consumed for self-generation of electricity

0

(7.30.7.4) MWh fuel consumed for self-generation of heat

0

(7.30.7.5) MWh fuel consumed for self-generation of steam

0

(7.30.7.7) MWh fuel consumed for self- cogeneration or self-trigeneration

0

(7.30.7.8) Comment

KMG does not consume coal

Oil

(7.30.7.1) Heating value

Select from:
☑ LHV

(7.30.7.2) Total fuel MWh consumed by the organization

2472

(7.30.7.3) MWh fuel consumed for self-generation of electricity

702

(7.30.7.4) MWh fuel consumed for self-generation of heat

1637

(7.30.7.5) MWh fuel consumed for self-generation of steam

133

(7.30.7.7) MWh fuel consumed for self- cogeneration or self-trigeneration

0

(7.30.7.8) Comment

compared to 2023 data, the figures have decreased

Gas

(7.30.7.1) Heating value

Select from:

☑ LHV

(7.30.7.2) Total fuel MWh consumed by the organization

29156255

(7.30.7.3) MWh fuel consumed for self-generation of electricity

8281398

(7.30.7.4) MWh fuel consumed for self-generation of heat

19308185

(7.30.7.5) MWh fuel consumed for self-generation of steam

1566672

(7.30.7.7) MWh fuel consumed for self- cogeneration or self-trigeneration

0

(7.30.7.8) Comment

compared to 2023 data, the figures have increased

Other non-renewable fuels (e.g. non-renewable hydrogen)

(7.30.7.1) Heating value

Select from:

☑ LHV

(7.30.7.2) Total fuel MWh consumed by the organization

1070706

(7.30.7.3) MWh fuel consumed for self-generation of electricity

257560

(7.30.7.4) MWh fuel consumed for self-generation of heat

707870

(7.30.7.5) MWh fuel consumed for self-generation of steam

105277

(7.30.7.7) MWh fuel consumed for self- cogeneration or self-trigeneration

0

(7.30.7.8) Comment

ompared to 2023 data, the figures have decreased

Total fuel

(7.30.7.1) Heating value

Select from:

☑ LHV

(7.30.7.2) Total fuel MWh consumed by the organization

30229434

(7.30.7.3) MWh fuel consumed for self-generation of electricity

8539660

(7.30.7.4) MWh fuel consumed for self-generation of heat

20017692

(7.30.7.5) MWh fuel consumed for self-generation of steam

1672082

(7.30.7.7) MWh fuel consumed for self- cogeneration or self-trigeneration

0

(7.30.7.8) Comment

compared to 2023 data, the figures have increased
[Fixed row]

(7.30.9) Provide details on the electricity, heat, steam, and cooling your organization has generated and consumed in the reporting year.

Electricity

(7.30.9.1) Total Gross generation (MWh)

737485

(7.30.9.2) Generation that is consumed by the organization (MWh)

737485

(7.30.9.3) Gross generation from renewable sources (MWh)

149

(7.30.9.4) Generation from renewable sources that is consumed by the organization (MWh)

149

Heat

(7.30.9.1) Total Gross generation (MWh)

70894

(7.30.9.2) Generation that is consumed by the organization (MWh)

70894

(7.30.9.3) Gross generation from renewable sources (MWh)

0

(7.30.9.4) Generation from renewable sources that is consumed by the organization (MWh)

0

Steam

(7.30.9.1) Total Gross generation (MWh)

6251474

(7.30.9.2) Generation that is consumed by the organization (MWh)

6251474

(7.30.9.3) Gross generation from renewable sources (MWh)

0

(7.30.9.4) Generation from renewable sources that is consumed by the organization (MWh)

0

Cooling

(7.30.9.1) Total Gross generation (MWh)

0

(7.30.9.2) Generation that is consumed by the organization (MWh)

0

(7.30.9.3) Gross generation from renewable sources (MWh)

0

(7.30.9.4) Generation from renewable sources that is consumed by the organization (MWh)

0
[Fixed row]

(7.30.14) Provide details on the electricity, heat, steam, and/or cooling amounts that were accounted for at a zero or near-zero emission factor in the market-based Scope 2 figure reported in 7.7.

Row 1

(7.30.14.1) Country/area

Select from:

☑ Kazakhstan

(7.30.14.2) Sourcing method

Select from:

☑ Default delivered electricity from the grid (e.g. standard product offering by an energy supplier), supported by energy attribute certificates

(7.30.14.3) Energy carrier

Select from:

☑ Electricity

(7.30.14.4) Low-carbon technology type

Select from:

☑ Renewable energy mix, please specify :wind, solar, hydro

(7.30.14.5) Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)

10000

(7.30.14.6) Tracking instrument used

Select from:

☑ I-REC

(7.30.14.7) Country/area of origin (generation) of the low-carbon energy or energy attribute

Select from:

☑ Kazakhstan

(7.30.14.8) Are you able to report the commissioning or re-powering year of the energy generation facility?

Select from:

☑ No

(7.30.14.10) Comment

In order to reduce indirect greenhouse gas emissions (Scope 2), JSC NC KazMunayGas acquired I-REC (International Renewable Energy Certificates) and extinguished them for 10.0 million kWh, which corresponds to the expected electricity consumption by KMG Corporate Center in 2024. Voluntary I-REC certificates confirm information on the fact of electricity generation from a renewable energy source (RES).
[Add row]

(7.30.16) Provide a breakdown by country/area of your electricity/heat/steam/cooling consumption in the reporting year.

Georgia

(7.30.16.1) Consumption of purchased electricity (MWh)

10665

(7.30.16.2) Consumption of self-generated electricity (MWh)

0

(7.30.16.4) Consumption of purchased heat, steam, and cooling (MWh)

0

(7.30.16.5) Consumption of self-generated heat, steam, and cooling (MWh)

0

(7.30.16.6) Total electricity/heat/steam/cooling energy consumption (MWh)

10665.00

Kazakhstan

(7.30.16.1) Consumption of purchased electricity (MWh)

4053422

(7.30.16.2) Consumption of self-generated electricity (MWh)

737634

(7.30.16.4) Consumption of purchased heat, steam, and cooling (MWh)

1104337

(7.30.16.5) Consumption of self-generated heat, steam, and cooling (MWh)

6322368

(7.30.16.6) Total electricity/heat/steam/cooling energy consumption (MWh)

12217761.00

Romania

(7.30.16.1) Consumption of purchased electricity (MWh)

364032

(7.30.16.2) Consumption of self-generated electricity (MWh)

0

(7.30.16.4) Consumption of purchased heat, steam, and cooling (MWh)

626479

(7.30.16.5) Consumption of self-generated heat, steam, and cooling (MWh)

0

(7.30.16.6) Total electricity/heat/steam/cooling energy consumption (MWh)

990511.00
[Fixed row]

(7.38) Disclose your net liquid and gas hydrocarbon production (total of subsidiaries and equity-accounted entities).

	In-year net production	Comment
Crude oil and condensate, million barrels	*174.8*	*23837 thousand tonnes. The crude oil production volumes covered 9 upstream assets under KMG operational control.*
Natural gas liquids, million barrels	*7.06*	*883 thousand tonnes. The natural gas liquids production volumes covered 9 upstream assets under KMG operational control*
Oil sands, million barrels (includes bitumen and synthetic crude)	*3.51*	*557 thousand tonnes bitumen*
Natural gas, billion cubic feet	*337.42*	*9554 mln m3. The natural gas liquids production volumes covered 9 upstream assets under KMG operational control*

[Fixed row]

(7.38.1) Explain which listing requirements or other methodologies you use to report reserves data. If your organization cannot provide data due to legal restrictions on reporting reserves figures in certain countries/areas, please explain this.

The main requirement for listing is the assessment of hydrocarbon reserves according to international SPE-PRMS standards

(7.38.2) Disclose your estimated total net reserves and resource base (million boe), including the total associated with subsidiaries and equity-accounted entities.

(7.38.2.1) Estimated total net proved + probable reserves (2P) (million BOE)

5551

(7.38.2.2) Estimated total net proved + probable + possible reserves (3P) (million BOE)

6111

(7.38.2.3) Estimated net total resource base (million BOE)

9965

(7.38.2.4) Comment

Compared to 2023, there was a decrease of only 2%, the replenishment of reserves includes an increase and a change in the categorization of reserves [Fixed row]

(7.38.3) Provide an indicative percentage split for 2P, 3P reserves, and total resource base by hydrocarbon categories.

Crude oil/ condensate/ natural gas liquids

(7.38.3.1) Net proved + probable reserves (2P) (%)

85

(7.38.3.2) Net proved + probable + possible reserves (3P) (%)

86

(7.38.3.3) Net total resource base (%)

76

(7.38.3.4) Comment

compared with the data of 2023, there is a slight increase in indicators

Natural gas

(7.38.3.1) Net proved + probable reserves (2P) (%)

15

(7.38.3.2) Net proved + probable + possible reserves (3P) (%)

14

(7.38.3.3) Net total resource base (%)

24

(7.38.3.4) Comment

For 2023, this line presented data on liquid natural gas. For 2024, we provide information on commercial natural gas reserves.

Oil sands (includes bitumen and synthetic crude)

(7.38.3.1) Net proved + probable reserves (2P) (%)

0

(7.38.3.2) Net proved + probable + possible reserves (3P) (%)

0

(7.38.3.3) Net total resource base (%)

0

(7.38.3.4) Comment

There are no oil sands (including bitumen and synthetic oil)

[Fixed row]

(7.38.4) Provide an indicative percentage split for production, 1P, 2P, 3P reserves, and total resource base by development types.

Row 1

(7.38.4.1) Development type

Select from:

☑ Onshore

(7.38.4.2) In-year net production (%)

88

(7.38.4.3) Net proved reserves (1P) (%)

68

(7.38.4.4) Net proved + probable reserves (2P) (%)

67

(7.38.4.5) Net proved + probable + possible reserves (3P) (%)

69

(7.38.4.6) Net total resource base (%)

78

(7.38.4.7) Comment

compared with the data of 2023, there is a slight decrese in indicators

Row 2

(7.38.4.1) Development type

Select from:

☑ Shallow-water

(7.38.4.2) In-year net production (%)

12

(7.38.4.3) Net proved reserves (1P) (%)

32

(7.38.4.4) Net proved + probable reserves (2P) (%)

33

(7.38.4.5) Net proved + probable + possible reserves (3P) (%)

31

(7.38.4.6) Net total resource base (%)

22

(7.38.4.7) Comment

compared with the data of 2023, there is a slight increase in indicators. this indicator takes into account the Kashagan B.V. fields.
[Add row]

(7.43) Disclose your total refinery throughput capacity in the reporting year in thousand barrels per day.

	Total refinery throughput capacity (Thousand barrels per day)
Capacity	*457.8*

[Fixed row]

(7.43.1) Disclose feedstocks processed in the reporting year in million barrels per year.

Oil

(7.43.1.1) Throughput (Million barrels)

140.44

(7.43.1.2) Comment

the indicator includes the volume of refined oil at Kazakhstan and Romania refineries (for 2 refineries of the Republic of Kazakhstan the share of ownership is assumed to be 100%)

Other feedstocks

(7.43.1.1) Throughput (Million barrels)

0

(7.43.1.2) Comment

volume of gas processed at the gas processing plant amounted to 246368 mln.m3 of gas

Total

(7.43.1.1) Throughput (Million barrels)

140.44

(7.43.1.2) Comment

he indicator includes the volume of refined oil at Kazakhstan and Romania refineries (for 2 refineries of the Republic of Kazakhstan the share of ownership is assumed to be 100%)
[Fixed row]

(7.43.2) Are you able to break down your refinery products and net production?

Select from:
☑ Yes

(7.43.3) Disclose your refinery products and net production in the reporting year in million barrels per year.

Row 1

(7.43.3.1) Product produced

Select from:
☑ Liquified petroleum gas

(7.43.3.2) Refinery net production (Million barrels) *not including products used/consumed on site

10.24

Row 2

(7.43.3.1) Product produced

Select from:
☑ Gasolines

(7.43.3.2) Refinery net production (Million barrels) *not including products used/consumed on site

47.31

Row 3

(7.43.3.1) Product produced

Select from:

☑ Other, please specify :jet fuel

(7.43.3.2) Refinery net production (Million barrels) *not including products used/consumed on site

7.78

Row 4

(7.43.3.1) Product produced

Select from:

☑ Fuel oils

(7.43.3.2) Refinery net production (Million barrels) *not including products used/consumed on site

11.2

Row 6

(7.43.3.1) Product produced

Select from:

☑ Diesel fuels

(7.43.3.2) Refinery net production (Million barrels) *not including products used/consumed on site

48.01

Row 7

(7.43.3.1) Product produced

Select from:

☑ Other, please specify :VGO

(7.43.3.2) Refinery net production (Million barrels) *not including products used/consumed on site

1.86

Row 8

(7.43.3.1) Product produced

Select from:

☑ Other, please specify :Paraxylene

(7.43.3.2) Refinery net production (Million barrels) *not including products used/consumed on site

0.8

Row 9

(7.43.3.1) Product produced

Select from:

☑ Other, please specify :bitumen

(7.43.3.2) Refinery net production (Million barrels) *not including products used/consumed on site

3.51
[Add row]

(7.43.4) Please disclose your petrochemicals production in the reporting year in thousand metric tons.

	Product	Production, Thousand metric tons	Capacity, Thousand metric tons
Row 1	*Select from:* ☑ Other, please specify :polypropylen	*249*	*560*
Row 2	*Select from:* ☑ Other, please specify :benzene	*28*	*133*
Row 5	*Select from:* ☑ Other, please specify :propylene	*83*	*80*

[Add row]

(7.45) Describe your gross global combined Scope 1 and 2 emissions for the reporting year in metric tons CO2e per unit currency total revenue and provide any additional intensity metrics that are appropriate to your business operations.

Row 1

(7.45.1) Intensity figure

0.00095

(7.45.2) Metric numerator (Gross global combined Scope 1 and 2 emissions, metric tons CO2e)

12477322

(7.45.3) Metric denominator

Select from:

☑ unit total revenue

(7.45.4) Metric denominator: Unit total

13192294598

(7.45.5) Scope 2 figure used

Select from:

☑ Location-based

(7.45.6) % change from previous year

11

(7.45.7) Direction of change

Select from:

☑ Increased

(7.45.8) Reasons for change

Select all that apply

☑ Change in methodology

☑ Change in boundary

(7.45.9) Please explain

The intensity indicator increased by 11% in the reporting year, as emissions of Scope 1+2 in the equivalent of tons of CO2 increased due to changes in the emission factor at one of the oil production companie in Scope 1, as well as the addition of 4 new subsidiaries. Revenue also increased. Therefore, the intensity index has increased overall.
[Add row]

(7.48) Provide the intensity figures for Scope 1 emissions (metric tons CO2e) per unit of hydrocarbon category.

Row 1

(7.48.1) Unit of hydrocarbon category (denominator)

Select from:

☑ Other, please specify :Thousand tonnes of hydrocarbon crude production

(7.48.2) Metric tons CO2e from hydrocarbon category per unit specified

121

(7.48.3) % change from previous year

6

(7.48.4) Direction of change

Select from:

☑ Increased

(7.48.5) Reason for change

The intensity of emissions increased from 114 tons of CO2 per thousand tons of produced hydrocarbons in 2023 to 121 thousand tons of CO2 per thousand tons of produced hydrocarbons. The increase is due to an increase in emissions from one of the oil production companies and the addition of 3 new oil production companies.

(7.48.6) Comment

this is an indicator of IOGP intensity: net CO2 emissions per extracted volume of hydrocarbons per thousand tons of oil equivalent by producing companies

Row 2

(7.48.1) Unit of hydrocarbon category (denominator)

Select from:

☑ Other, please specify :The reported value corresponds to the emission rate data we provide to IOGP. Thus, the emission rate is estimated based on data provided by only seven upstream companies (in the upper segment)

(7.48.2) Metric tons CO2e from hydrocarbon category per unit specified

182

(7.48.3) % change from previous year

12

(7.48.4) Direction of change

Select from:

☑ Increased

(7.48.5) Reason for change

The intensity of emissions increased from 163 tons of CO2 equivalent per thousand tons of produced hydrocarbons in 2023 to 182 tons of CO2 equivalent per thousand tons of produced hydrocarbons in 2024. The increase is due to an increase in emissions from one of the production companies and the addition of 3 new production companies. We also recalculated the 2023 figure due to the fact that a typo was made (instead of 163, 136 was mistakenly indicated).

(7.48.6) Comment

this is an indicator of IOGP intensity: emissions of tons of CO2 equivalent per produced volume of hydrocarbons per thousand tons of oil equivalent by producing companies

Row 3

(7.48.1) Unit of hydrocarbon category (denominator)

Select from:

☑ Other, please specify

(7.48.2) Metric tons CO2e from hydrocarbon category per unit specified

228

(7.48.3) % change from previous year

4

(7.48.4) Direction of change

Select from:

☑ Decreased

(7.48.5) Reason for change

The intensity of emissions decreased slightly to 228 tons of CO2 per thousand tons of refined oil. (in 2023, the intensity was 237 tons of CO2 per thousand tons of refined oil). The decrease is due to a slight reduction in emissions from 3 refineries.

(7.48.6) Comment

this is an indicator of the intensity of the plants: emissions of tons of pure CO2 per volume of refined oil from 3 refineries

Row 4

(7.48.1) Unit of hydrocarbon category (denominator)

Select from:

☑ Other, please specify :indicator of emission intensity of tons of CO2 equivalent per thousand barrels of refined oil from 3 refineries

(7.48.2) Metric tons CO2e from hydrocarbon category per unit specified

31

(7.48.3) % change from previous year

8

(7.48.4) Direction of change

Select from:

☑ Decreased

(7.48.5) Reason for change

The intensity of emissions decreased from 34 tons of CO2 equivalent per thousand barrels of the actual capacity of our refineries in 2023 to 31 tons of CO2 equivalent per thousand barrels in 2024. The decrease is due to a slight reduction in emissions from 3 refineries.

(7.48.6) Comment

indicator of emission intensity of tons of CO2 equivalent per thousand barrels of refined oil from 3 refineries
[Add row]

(7.52) Provide any additional climate-related metrics relevant to your business.

Row 1

(7.52.1) Description

Select from:
☑ Waste

(7.52.2) Metric value

437.4

(7.52.3) Metric numerator

thousand tons

(7.52.4) Metric denominator (intensity metric only)

0,96 t/t Ratio of the amount of waste recycled

(7.52.5) % change from previous year

0

(7.52.6) Direction of change

Select from:

☑ No change

(7.52.7) Please explain

The waste management process includes accumulation, landfilling, disposal, or transfer to specialized licensed contractors authorized for waste treatment and disposal. To reduce environmental impact from transportation, subsidiaries and dependent entities are encouraged to process waste on site or reduce movement where possible.

Row 2

(7.52.1) Description

Select from:

☑ Energy usage

(7.52.2) Metric value

129.4

(7.52.3) Metric numerator

mln GJ

(7.52.4) Metric denominator (intensity metric only)

2,55 GJ/t the specific energy consumption

(7.52.5) % change from previous year

4

(7.52.6) Direction of change

Select from:

☑ Increased

(7.52.7) Please explain

In 2024, total fuel and energy resource (FER) consumption across the KMG Group amounted to 129.4 million GJ, a 4% increase compared to 2023 (124.1 million GJ). The increase in energy consumption was driven by the commissioning of new subsidiaries and dependent entities – Dunga, Urikhtau Operating, Ural Oil and Gas, and KPI.
[Add row]

(7.53) Did you have an emissions target that was active in the reporting year?

Select all that apply

☑ Absolute target

☑ Intensity target

(7.53.1) Provide details of your absolute emissions targets and progress made against those targets.

Row 1

(7.53.1.1) Target reference number

Select from:

☑ Abs 1

(7.53.1.2) Is this a science-based target?

Select from:

☑ No, and we do not anticipate setting one in the next two years

(7.53.1.5) Date target was set

11/12/2024

(7.53.1.6) Target coverage

Select from:

☑ Product level

(7.53.1.7) Greenhouse gases covered by target

Select all that apply

☑ Carbon dioxide (CO2)

(7.53.1.8) Scopes

Select all that apply

☑ Scope 1

☑ Scope 2

(7.53.1.9) Scope 2 accounting method

Select from:

☑ Location-based

(7.53.1.11) End date of base year

12/30/2019

(7.53.1.12) Base year Scope 1 emissions covered by target (metric tons CO2e)

7424062

(7.53.1.13) Base year Scope 2 emissions covered by target (metric tons CO2e)

3304832

(7.53.1.31) Base year total Scope 3 emissions covered by target (metric tons CO2e)

0.000

(7.53.1.32) Total base year emissions covered by target in all selected Scopes (metric tons CO2e)

10728894.000

(7.53.1.33) Base year Scope 1 emissions covered by target as % of total base year emissions in Scope 1

100

(7.53.1.34) Base year Scope 2 emissions covered by target as % of total base year emissions in Scope 2

100

(7.53.1.53) Base year emissions covered by target in all selected Scopes as % of total base year emissions in all selected Scopes

100

(7.53.1.54) End date of target

12/30/2060

(7.53.1.55) Targeted reduction from base year (%)

64

(7.53.1.56) Total emissions at end date of target covered by target in all selected Scopes (metric tons CO2e)

3862401.840

(7.53.1.57) Scope 1 emissions in reporting year covered by target (metric tons CO2e)

7370973

(7.53.1.58) Scope 2 emissions in reporting year covered by target (metric tons CO2e)

3317275

(7.53.1.77) Total emissions in reporting year covered by target in all selected scopes (metric tons CO2e)

10688248.000

(7.53.1.78) Land-related emissions covered by target

Select from:

☑ No, it does not cover any land-related emissions (e.g. non-FLAG SBT)

(7.53.1.79) % of target achieved relative to base year

0.59

(7.53.1.80) Target status in reporting year

Select from:

☑ Underway

(7.53.1.82) Explain target coverage and identify any exclusions

According to the Low-Carbon Development Program, the emission reduction targets only account for tons of CO2.

(7.53.1.83) Target objective

Reduction of absolute Scope 1+2 emissions by 15% by 2031 and by -64% by 2060 compared to the base year of 2019. Emissions in tons of CO2 are taken as the emissions coverage

(7.53.1.84) Plan for achieving target, and progress made to the end of the reporting year

2024 Results: ● KMG's Low-Carbon Development Program through 2060 was approved; ● Corporate methodology for GHG emissions monitoring and reporting was updated to include Scope 1, 2, and 3 emissions and approaches to inventorying, accounting, and disclosure; ● A Hydrogen Atlas was developed; a green hydrogen pilot project is underway, and lab samples of iron and titanium alloys for hydrogen storage were obtained; ● A feasibility study on SAF (Sustainable Aviation Fuel) production in Kazakhstan was completed with Air Astana and EBRD support; ● Sites in Pavlodar Region were identified for a forest-climate project, including a carbon sequestration assessment and working plan for green space development; ● First methane emissions report submitted to UNEP under OGMP 2.0 initiative; ● KMG specialists trained in methane leak management; field measurements conducted at two subsidiaries; ● Instruction for methane emissions management across the KMG Group was adopted; ● At COP28, KMG joined the Oil and Gas Decarbonization Charter. Key Initiatives: ● Implementation of internal carbon pricing; ● Participation in the Carbon Disclosure Project and disclosure of climate risks per TCFD; ● Methane emissions management in cooperation with Carbon Limits, IFC, and Tetra Tech Inc; ● Participant in UNEP OGMP 2.0 methane initiative; ● Signatory to the Oil and Gas; Decarbonization Charter; ● Forest-climate offset project in partnership with Chevron in Pavlodar Region. ● 70 activities were implemented under the Low-Carbon Development Plan; ● Annual savings of fuel and energy

resources amounted to 2.36 million GJ, equivalent to a reduction of 174.9 thousand tonnes of CO_2 emissions; ● Energy consumption at production facilities was optimized through equipment upgrades and automation of technological processes.

(7.53.1.85) Target derived using a sectoral decarbonization approach

Select from:

☑ No

Row 2

(7.53.1.1) Target reference number

Select from:

☑ Abs 2

(7.53.1.2) Is this a science-based target?

Select from:

☑ No, and we do not anticipate setting one in the next two years

(7.53.1.5) Date target was set

11/12/2024

(7.53.1.6) Target coverage

Select from:

☑ Other, please specify

(7.53.1.7) Greenhouse gases covered by target

Select all that apply

☑ Methane (CH4)

(7.53.1.8) Scopes

Select all that apply

☑ Scope 1

(7.53.1.11) End date of base year

12/30/2019

(7.53.1.12) Base year Scope 1 emissions covered by target (metric tons CO2e)

1520000

(7.53.1.31) Base year total Scope 3 emissions covered by target (metric tons CO2e)

0.000

(7.53.1.32) Total base year emissions covered by target in all selected Scopes (metric tons CO2e)

1520000.000

(7.53.1.33) Base year Scope 1 emissions covered by target as % of total base year emissions in Scope 1

80

(7.53.1.53) Base year emissions covered by target in all selected Scopes as % of total base year emissions in all selected Scopes

80

(7.53.1.54) End date of target

12/30/2060

(7.53.1.55) Targeted reduction from base year (%)

96

(7.53.1.56) Total emissions at end date of target covered by target in all selected Scopes (metric tons CO2e)

60800.000

(7.53.1.57) Scope 1 emissions in reporting year covered by target (metric tons CO2e)

1333109

(7.53.1.77) Total emissions in reporting year covered by target in all selected scopes (metric tons CO2e)

1333109.000

(7.53.1.78) Land-related emissions covered by target

Select from:

☑ No, it does not cover any land-related emissions (e.g. non-FLAG SBT)

(7.53.1.79) % of target achieved relative to base year

12.81

(7.53.1.80) Target status in reporting year

Select from:

☑ Underway

(7.53.1.82) Explain target coverage and identify any exclusions

According to the Low-Carbon Development Program the target includes methane emissions for oil producing companies (excluding refineries) in absolute terms in tons of CO2.

(7.53.1.83) Target objective

Reduction of absolute emissions (in tons of CO2 equivalent) under scope 1 by -32% compared to the base year of 2019 by 2031 and by -96% by 2060.

(7.53.1.84) Plan for achieving target, and progress made to the end of the reporting year

Work done in 2024: ● In May 2024, KMG submitted its first methane emissions reports under the OGMP 2.0 for 2023 and in May 2025 for 2024. ● Conducted jointly with IFC and Carbon Limits methodological support for the preparation of reports. ● In June 2024, Tetra Tech ES, Inc. carried out a measurement campaign at the facilities of JSC Ozenmunaigas and KazGPZ LLP. ● A number of trainings and seminars on monitoring and elimination technologies have been organized methane leaks for production personnel

(7.53.1.85) Target derived using a sectoral decarbonization approach

Select from:

☑ No

Row 3

(7.53.1.1) Target reference number

Select from:

☑ Abs 3

(7.53.1.2) Is this a science-based target?

Select from:

☑ No, and we do not anticipate setting one in the next two years

(7.53.1.5) Date target was set

11/12/2024

(7.53.1.6) Target coverage

Select from:

☑ Product level

(7.53.1.7) Greenhouse gases covered by target

Select all that apply

☑ Carbon dioxide (CO2)

(7.53.1.8) Scopes

Select all that apply

☑ Scope 1

☑ Scope 2

(7.53.1.9) Scope 2 accounting method

Select from:

☑ Location-based

(7.53.1.11) End date of base year

12/30/2019

(7.53.1.12) Base year Scope 1 emissions covered by target (metric tons CO2e)

7242062

(7.53.1.13) Base year Scope 2 emissions covered by target (metric tons CO2e)

3304832

(7.53.1.31) Base year total Scope 3 emissions covered by target (metric tons CO2e)

0.000

(7.53.1.32) Total base year emissions covered by target in all selected Scopes (metric tons CO2e)

10546894.000

(7.53.1.33) Base year Scope 1 emissions covered by target as % of total base year emissions in Scope 1

100

(7.53.1.34) Base year Scope 2 emissions covered by target as % of total base year emissions in Scope 2

100

(7.53.1.53) Base year emissions covered by target in all selected Scopes as % of total base year emissions in all selected Scopes

100

(7.53.1.54) End date of target

12/30/2031

(7.53.1.55) Targeted reduction from base year (%)

15

(7.53.1.56) Total emissions at end date of target covered by target in all selected Scopes (metric tons CO2e)

8964859.900

(7.53.1.57) Scope 1 emissions in reporting year covered by target (metric tons CO2e)

7370973

(7.53.1.58) Scope 2 emissions in reporting year covered by target (metric tons CO2e)

3317275

(7.53.1.77) Total emissions in reporting year covered by target in all selected scopes (metric tons CO2e)

10688248.000

(7.53.1.78) Land-related emissions covered by target

Select from:

☑ No, it does not cover any land-related emissions (e.g. non-FLAG SBT)

(7.53.1.79) % of target achieved relative to base year

-8.93

(7.53.1.80) Target status in reporting year

Select from:

☑ Underway

(7.53.1.82) Explain target coverage and identify any exclusions

According to the Low-Carbon Development Program, the emission reduction targets only account for tons of CO2.

(7.53.1.83) Target objective

Reduction of absolute Scope 1+2 emissions by 15% by 2031 and by -64% by 2060 compared to the base year of 2019. Emissions in tons of CO2 are taken as the emissions coverage

(7.53.1.84) Plan for achieving target, and progress made to the end of the reporting year

2024 Results: ● KMG's Low-Carbon Development Program through 2060 was approved; ● Corporate methodology for GHG emissions monitoring and reporting was updated to include Scope 1, 2, and 3 emissions and approaches to inventorying, accounting, and disclosure; ● A Hydrogen Atlas was developed; a green hydrogen pilot project is underway, and lab samples of iron and titanium alloys for hydrogen storage were obtained; ● A feasibility study on SAF (Sustainable Aviation Fuel) production in Kazakhstan was completed with Air Astana and EBRD support; ● Sites in Pavlodar Region were identified for a forest-climate project, including a carbon sequestration assessment and working plan for green space development; ● First methane emissions report submitted to UNEP under OGMP 2.0 initiative; ● KMG specialists trained in methane leak management; field measurements conducted at two subsidiaries; ● Instruction for methane emissions management across the KMG Group was adopted; ● At COP28, KMG joined the Oil and Gas Decarbonization Charter. Key Initiatives: ● Implementation of internal carbon pricing; ● Participation in the Carbon Disclosure Project and disclosure of climate risks per TCFD; ● Methane emissions management in cooperation with Carbon Limits, IFC, and Tetra Tech Inc; ● Participant in UNEP OGMP 2.0 methane initiative; ● Signatory to the Oil and Gas; Decarbonization Charter; ● Forest-climate offset project in partnership with Chevron in Pavlodar Region. ● 70 activities were implemented under the Low-Carbon Development Plan; ● Annual savings of fuel and energy resources amounted to 2.36 million GJ, equivalent to a reduction of 174.9 thousand tonnes of CO_2 emissions; ● Energy consumption at production facilities was optimized through equipment upgrades and automation of technological processes.

(7.53.1.85) Target derived using a sectoral decarbonization approach

Select from:

☑ No

Row 4

(7.53.1.1) Target reference number

Select from:

☑ Abs 4

(7.53.1.2) Is this a science-based target?

Select from:

☑ No, and we do not anticipate setting one in the next two years

(7.53.1.5) Date target was set

11/12/2024

(7.53.1.6) Target coverage

Select from:

☑ Other, please specify

(7.53.1.7) Greenhouse gases covered by target

Select all that apply

☑ Methane (CH4)

(7.53.1.8) Scopes

Select all that apply

☑ Scope 1

(7.53.1.11) End date of base year

12/30/2019

(7.53.1.12) Base year Scope 1 emissions covered by target (metric tons CO2e)

1520000

(7.53.1.31) Base year total Scope 3 emissions covered by target (metric tons CO2e)

0.000

(7.53.1.32) Total base year emissions covered by target in all selected Scopes (metric tons CO2e)

1520000.000

(7.53.1.33) Base year Scope 1 emissions covered by target as % of total base year emissions in Scope 1

80

(7.53.1.53) Base year emissions covered by target in all selected Scopes as % of total base year emissions in all selected Scopes

80

(7.53.1.54) End date of target

12/30/2031

(7.53.1.55) Targeted reduction from base year (%)

32

(7.53.1.56) Total emissions at end date of target covered by target in all selected Scopes (metric tons CO2e)

1033600.000

(7.53.1.57) Scope 1 emissions in reporting year covered by target (metric tons CO2e)

1333109

(7.53.1.77) Total emissions in reporting year covered by target in all selected scopes (metric tons CO2e)

1333109.000

(7.53.1.78) Land-related emissions covered by target

Select from:

☑ No, it does not cover any land-related emissions (e.g. non-FLAG SBT)

(7.53.1.79) % of target achieved relative to base year

38.42

(7.53.1.80) Target status in reporting year

Select from:

☑ Underway

(7.53.1.82) Explain target coverage and identify any exclusions

According to the Low-Carbon Development Program the target includes methane emissions for oil producing companies (excluding refineries) in absolute terms in tons of CO2.

(7.53.1.83) Target objective

Reduction of absolute emissions (in tons of CO2 equivalent) under scope 1 by -32% compared to the base year of 2019 by 2031 and by -96% by 2060.

(7.53.1.84) Plan for achieving target, and progress made to the end of the reporting year

Work done in 2024: ● In May 2024, KMG submitted its first methane emissions reports under the OGMP 2.0 for 2023 and in May 2025 for 2024. ● Conducted jointly with IFC and Carbon Limits methodological support for the preparation of reports. ● In June 2024, Tetra Tech ES, Inc. carried out a measurement campaign at the facilities of JSC Ozenmunaigas and KazGPZ LLP. ● A number of trainings and seminars on monitoring and elimination technologies have been organized methane leaks for production personnel

(7.53.1.85) Target derived using a sectoral decarbonization approach

Select from:

☑ No
[Add row]

(7.53.2) Provide details of your emissions intensity targets and progress made against those targets.

Row 1

(7.53.2.1) Target reference number

Select from:
☑ Int 3

(7.53.2.2) Is this a science-based target?

Select from:
☑ No, and we do not anticipate setting one in the next two years

(7.53.2.5) Date target was set

11/03/2021

(7.53.2.6) Target coverage

Select from:
☑ Business activity

(7.53.2.7) Greenhouse gases covered by target

Select all that apply
☑ Carbon dioxide (CO2)

(7.53.2.8) Scopes

Select all that apply

☑ Scope 1
☑ Scope 2

(7.53.2.9) Scope 2 accounting method

Select from:
☑ Location-based

(7.53.2.11) Intensity metric

Select from:
☑ Other, please specify :metric tons of CO2-e per thousand tons of crude oil

(7.53.2.12) End date of base year

12/30/2019

(7.53.2.13) Intensity figure in base year for Scope 1

38.5

(7.53.2.14) Intensity figure in base year for Scope 2

15.9

(7.53.2.33) Intensity figure in base year for all selected Scopes

54.4000000000

(7.53.2.34) % of total base year emissions in Scope 1 covered by this Scope 1 intensity figure

0.5

(7.53.2.35) % of total base year emissions in Scope 2 covered by this Scope 2 intensity figure

0.4

(7.53.2.54) % of total base year emissions in all selected Scopes covered by this intensity figure

0.5

(7.53.2.55) End date of target

12/30/2031

(7.53.2.56) Targeted reduction from base year (%)

10

(7.53.2.57) Intensity figure at end date of target for all selected Scopes

48.9600000000

(7.53.2.58) % change anticipated in absolute Scope 1+2 emissions

-15

(7.53.2.60) Intensity figure in reporting year for Scope 1

49.5

(7.53.2.61) Intensity figure in reporting year for Scope 2

19.6

(7.53.2.80) Intensity figure in reporting year for all selected Scopes

69.1000000000

(7.53.2.81) Land-related emissions covered by target

Select from:

☑ No, it does not cover any land-related emissions (e.g. non-FLAG SBT)

(7.53.2.82) % of target achieved relative to base year

-270.22

(7.53.2.83) Target status in reporting year

Select from:

☑ Underway

(7.53.2.85) Explain target coverage and identify any exclusions

The target of carbon intensity reduction by 10% by 2031 has been set for bitumen production facility in Kazakhstan, which are under our operational control.. According to the Low-Carbon Development Program, the emission reduction targets only account for tons of CO2. These are the main targets for reducing the intensity of greenhouse gas emissions. These targets were set in the low-carbon development program in 2021, until 2031. In 2024, when the Program was updated to 2060, we also adhere to achieving this goal by 2031, and also set a target by 2060 of 27 tons of CO2-eq / per thousand tons of oil

(7.53.2.86) Target objective

The target of carbon intensity reduction by 10% by 2031 has been set for bitumen production facility in Kazakhstan, which are under our operational control. These targets were set in the low-carbon development program in 2021, until 2031. In 2024, when the Program was updated to 2060, we also adhere to achieving this goal by 2031, and also set a target by 2060 of 27 tons of CO2-eq / per thousand tons of oil. Other targets are reflected in the Low-Carbon Development Program, available on the official website. https://www.kmg.kz/upload/iblock/bef/j2mi9ld1667su8dxitg3583q27570w8r/%D0%9F%D0%9D%D0%A3%D0%A0_2060_%20RU%20-%20FINAL.pdf

(7.53.2.87) Plan for achieving target, and progress made to the end of the reporting year

The target has not been reached yet. But we make efforts every year to achieve this. 2024 Results: ● KMG's Low-Carbon Development Program through 2060 was approved; ● Corporate methodology for GHG emissions monitoring and reporting was updated to include Scope 1, 2, and 3 emissions and approaches to inventorying, accounting, and disclosure; ● A Hydrogen Atlas was developed; a green hydrogen pilot project is underway, and lab samples of iron and titanium alloys for hydrogen storage were obtained; ● A feasibility study on SAF (Sustainable Aviation Fuel) production in Kazakhstan was completed with Air Astana and EBRD support; ● Sites in Pavlodar Region were identified for a forest-climate project, including a carbon sequestration assessment and working plan for green space development; ● First methane emissions report submitted to UNEP under OGMP 2.0 initiative; ● KMG specialists trained in methane leak management; field measurements conducted at two subsidiaries; ● Instruction for methane emissions management across the KMG Group was adopted; ● At COP28, KMG joined the Oil and Gas Decarbonization Charter. Key Initiatives: ● Implementation of internal carbon pricing; ● Participation in the Carbon Disclosure Project and disclosure of climate risks per TCFD; ● Methane emissions management in cooperation with Carbon Limits, IFC, and Tetra Tech Inc; ● Participant in UNEP OGMP 2.0 methane initiative; ● Signatory to the Oil and Gas; Decarbonization Charter; ● Forest-climate offset project in partnership with Chevron in Pavlodar Region. ● 70 activities were implemented under the Low-Carbon Development Plan; ● Annual savings of fuel and energy resources amounted to 2.36 million GJ, equivalent to a reduction of

174.9 thousand tonnes of CO_2 emissions; ● Energy consumption at production facilities was optimized through equipment upgrades and automation of technological processes.

(7.53.2.88) Target derived using a sectoral decarbonization approach

Select from:

☑ Yes

Row 2

(7.53.2.1) Target reference number

Select from:

☑ Int 2

(7.53.2.2) Is this a science-based target?

Select from:

☑ No, and we do not anticipate setting one in the next two years

(7.53.2.5) Date target was set

11/03/2021

(7.53.2.6) Target coverage

Select from:

☑ Business activity

(7.53.2.7) Greenhouse gases covered by target

Select all that apply

☑ Carbon dioxide (CO2)

(7.53.2.8) Scopes

Select all that apply

☑ Scope 1

☑ Scope 2

(7.53.2.9) Scope 2 accounting method

Select from:

☑ Location-based

(7.53.2.11) Intensity metric

Select from:

☑ Other, please specify :metric tons of CO2-e per thousand tons of crude oil

(7.53.2.12) End date of base year

12/30/2019

(7.53.2.13) Intensity figure in base year for Scope 1

229.9

(7.53.2.14) Intensity figure in base year for Scope 2

100.4

(7.53.2.33) Intensity figure in base year for all selected Scopes

330.3000000000

(7.53.2.34) % of total base year emissions in Scope 1 covered by this Scope 1 intensity figure

50.0

(7.53.2.35) % of total base year emissions in Scope 2 covered by this Scope 2 intensity figure

49.0

(7.53.2.54) % of total base year emissions in all selected Scopes covered by this intensity figure

50.0

(7.53.2.55) End date of target

12/30/2031

(7.53.2.56) Targeted reduction from base year (%)

10

(7.53.2.57) Intensity figure at end date of target for all selected Scopes

297.2700000000

(7.53.2.58) % change anticipated in absolute Scope 1+2 emissions

-15

(7.53.2.60) Intensity figure in reporting year for Scope 1

227.5

(7.53.2.61) Intensity figure in reporting year for Scope 2

85.2

(7.53.2.80) Intensity figure in reporting year for all selected Scopes

312.7000000000

(7.53.2.81) Land-related emissions covered by target

Select from:

☑ No, it does not cover any land-related emissions (e.g. non-FLAG SBT)

(7.53.2.82) % of target achieved relative to base year

53.28

(7.53.2.83) Target status in reporting year

Select from:

☑ Underway

(7.53.2.85) Explain target coverage and identify any exclusions

The target of carbon intensity reduction by 10% by 2031 has been set for 3 large refineries in Kazakhstan, which are under our operational control. According to the Low-Carbon Development Program, the emission reduction targets only account for tons of CO2. These targets were set in the low-carbon development program in 2021, until 2031. In 2024, when the Program was updated to 2060, we also adhere to achieving this goal by 2031, and also set a target by 2060 of 6tons of CO2-eq /thousand tons of oil by 2060.

(7.53.2.86) Target objective

The target of carbon intensity reduction by 10% by 2031 has been set for 3 large refineries in Kazakhstan. According to the Low-Carbon Development Program, the emission reduction targets only account for tons of CO2. These targets were set in the low-carbon development program in 2021, until 2031. In 2024, when the Program was updated to 2060, we also adhere to achieving this goal by 2031, and also set a target by 2060 of 6tons of CO2-eq /thousand tons of oil by 2060.

(7.53.2.87) Plan for achieving target, and progress made to the end of the reporting year

The target has not been reached yet. But we make efforts every year to achieve this. 2024 Results: ● KMG's Low-Carbon Development Program through 2060 was approved; ● Corporate methodology for GHG emissions monitoring and reporting was updated to include Scope 1, 2, and 3 emissions and approaches to inventorying, accounting, and disclosure; ● A Hydrogen Atlas was developed; a green hydrogen pilot project is underway, and lab samples of iron and titanium alloys for hydrogen storage were obtained; ● A feasibility study on SAF (Sustainable Aviation Fuel) production in Kazakhstan was completed with Air Astana and EBRD support; ● Sites in Pavlodar Region were identified for a forest-climate project, including a carbon sequestration assessment and working plan for green space development; ● First methane emissions report submitted to UNEP under OGMP 2.0 initiative; ● KMG specialists trained in methane leak management; field measurements conducted at two subsidiaries; ● Instruction for methane emissions management across the KMG Group was adopted; ● At COP28, KMG joined the Oil and Gas Decarbonization Charter. Key Initiatives: ● Implementation of internal carbon pricing; ● Participation in the Carbon Disclosure Project and disclosure of climate risks per TCFD; ● Methane emissions management in cooperation with Carbon Limits, IFC, and Tetra Tech Inc; ● Participant in UNEP OGMP 2.0 methane initiative; ● Signatory to the Oil and Gas; Decarbonization Charter; ● Forest-climate offset project in partnership with Chevron in Pavlodar Region. ● 70 activities were implemented under the Low-Carbon Development Plan; ● Annual savings of fuel and energy resources amounted to 2.36 million GJ, equivalent to a reduction of

174.9 thousand tonnes of CO_2 emissions; ● Energy consumption at production facilities was optimized through equipment upgrades and automation of technological processes.

(7.53.2.88) Target derived using a sectoral decarbonization approach

Select from:

☑ Yes

Row 3

(7.53.2.1) Target reference number

Select from:

☑ Int 1

(7.53.2.2) Is this a science-based target?

Select from:

☑ No, and we do not anticipate setting one in the next two years

(7.53.2.5) Date target was set

11/03/2021

(7.53.2.6) Target coverage

Select from:

☑ Business activity

(7.53.2.7) Greenhouse gases covered by target

Select all that apply

☑ Carbon dioxide (CO2)

(7.53.2.8) Scopes

Select all that apply

☑ Scope 1

☑ Scope 2

(7.53.2.9) Scope 2 accounting method

Select from:

☑ Location-based

(7.53.2.11) Intensity metric

Select from:

☑ Other, please specify :Metric tons of CO2-e per thousand tons of produced hydrocarbons

(7.53.2.12) End date of base year

12/30/2019

(7.53.2.13) Intensity figure in base year for Scope 1

93.0

(7.53.2.14) Intensity figure in base year for Scope 2

54.6

(7.53.2.33) Intensity figure in base year for all selected Scopes

147.6000000000

(7.53.2.34) % of total base year emissions in Scope 1 covered by this Scope 1 intensity figure

30.0

(7.53.2.35) % of total base year emissions in Scope 2 covered by this Scope 2 intensity figure

37.0

(7.53.2.54) % of total base year emissions in all selected Scopes covered by this intensity figure

32.0

(7.53.2.55) End date of target

12/30/2031

(7.53.2.56) Targeted reduction from base year (%)

10

(7.53.2.57) Intensity figure at end date of target for all selected Scopes

132.8400000000

(7.53.2.58) % change anticipated in absolute Scope 1+2 emissions

-15

(7.53.2.60) Intensity figure in reporting year for Scope 1

124.98

(7.53.2.61) Intensity figure in reporting year for Scope 2

58.62

(7.53.2.80) Intensity figure in reporting year for all selected Scopes

183.6000000000

(7.53.2.81) Land-related emissions covered by target

Select from:

☑ No, it does not cover any land-related emissions (e.g. non-FLAG SBT)

(7.53.2.82) % of target achieved relative to base year

-243.90

(7.53.2.83) Target status in reporting year

Select from:

☑ Underway

(7.53.2.85) Explain target coverage and identify any exclusions

The target of carbon intensity reduction by 10% by 2031 has been set for upstream facilities in Kazakhstan, which are under our operational control. According to the LowCarbon Development Program, the emission reduction targets only account for tons of CO2. These targets were set in the low-carbon development program in 2021, until 2031. In 2024, when the Program was updated to 2060, we also adhere to achieving this goal by 2031, and also set a target by 2060 of 152 tons of CO2-eq /thousand tons of oil by 2060.

(7.53.2.86) Target objective

The target of carbon intensity reduction by 10% by 2031 has been set for upstream facilities in Kazakhstan, which are under our operational control. These targets were set in the low-carbon development program in 2021, until 2031. In 2024, when the Program was updated to 2060, we also adhere to achieving this goal by 2031, and also set a target by 2060 of 152 tons of CO2-eq /thousand tons of oil by 2060.

(7.53.2.87) Plan for achieving target, and progress made to the end of the reporting year

The target has not been reached yet. But we make efforts every year to achieve this. 2024 Results: ● KMG's Low-Carbon Development Program through 2060 was approved; ● Corporate methodology for GHG emissions monitoring and reporting was updated to include Scope 1, 2, and 3 emissions and approaches to inventorying, accounting, and disclosure; ● A Hydrogen Atlas was developed; a green hydrogen pilot project is underway, and lab samples of iron and titanium alloys for hydrogen storage were obtained; ● A feasibility study on SAF (Sustainable Aviation Fuel) production in Kazakhstan was completed with Air Astana and EBRD support; ● Sites in Pavlodar Region were identified for a forest-climate project, including a carbon sequestration assessment and working plan for green space development; ● First methane emissions report submitted to UNEP under OGMP 2.0 initiative; ● KMG specialists trained in methane leak management; field measurements conducted at two subsidiaries; ● Instruction for methane emissions management across the KMG Group was adopted; ● At COP28, KMG joined the Oil and Gas Decarbonization Charter. Key Initiatives: ● Implementation of internal carbon pricing; ● Participation in the Carbon Disclosure Project and disclosure of climate risks per TCFD; ● Methane emissions management in cooperation with Carbon Limits, IFC, and Tetra Tech Inc; ● Participant in UNEP OGMP 2.0 methane initiative; ● Signatory to the Oil and Gas; Decarbonization Charter; ● Forest-climate offset project in partnership with Chevron in Pavlodar Region. ● 70 activities were implemented under the Low-Carbon Development Plan; ● Annual savings of fuel and energy resources amounted to 2.36 million GJ, equivalent to a reduction of

174.9 thousand tonnes of CO_2 emissions; ● Energy consumption at production facilities was optimized through equipment upgrades and automation of technological processes.

(7.53.2.88) Target derived using a sectoral decarbonization approach

Select from:

☑ Yes

Row 4

(7.53.2.1) Target reference number

Select from:

☑ Int 4

(7.53.2.2) Is this a science-based target?

Select from:

☑ No, and we do not anticipate setting one in the next two years

(7.53.2.5) Date target was set

11/03/2021

(7.53.2.6) Target coverage

Select from:

☑ Business activity

(7.53.2.7) Greenhouse gases covered by target

Select all that apply

☑ Carbon dioxide (CO2)

(7.53.2.8) Scopes

Select all that apply

☑ Scope 1

☑ Scope 2

(7.53.2.9) Scope 2 accounting method

Select from:

☑ Location-based

(7.53.2.11) Intensity metric

Select from:

☑ Other, please specify :metric tons of CO2-e per thousand tons of crude oil

(7.53.2.12) End date of base year

12/30/2019

(7.53.2.13) Intensity figure in base year for Scope 1

3.76

(7.53.2.14) Intensity figure in base year for Scope 2

5.51

(7.53.2.33) Intensity figure in base year for all selected Scopes

9.2700000000

(7.53.2.34) % of total base year emissions in Scope 1 covered by this Scope 1 intensity figure

4.0

(7.53.2.35) % of total base year emissions in Scope 2 covered by this Scope 2 intensity figure

8.0

(7.53.2.54) % of total base year emissions in all selected Scopes covered by this intensity figure

5.0

(7.53.2.55) End date of target

12/30/2031

(7.53.2.56) Targeted reduction from base year (%)

10

(7.53.2.57) Intensity figure at end date of target for all selected Scopes

8.3430000000

(7.53.2.58) % change anticipated in absolute Scope 1+2 emissions

-15

(7.53.2.60) Intensity figure in reporting year for Scope 1

3.7

(7.53.2.61) Intensity figure in reporting year for Scope 2

4.7

(7.53.2.80) Intensity figure in reporting year for all selected Scopes

8.4000000000

(7.53.2.81) Land-related emissions covered by target

Select from:

☑ No, it does not cover any land-related emissions (e.g. non-FLAG SBT)

(7.53.2.82) % of target achieved relative to base year

93.85

(7.53.2.83) Target status in reporting year

Select from:

☑ Underway

(7.53.2.85) Explain target coverage and identify any exclusions

The target of carbon intensity reduction by 10% by 2031 has been set for midstream facilities in Kazakhstan. According to the Low-Carbon Development Program, the emission reduction targets only account for tons of CO2. These targets were set in the low-carbon development program in 2021, until 2031. In 2024, when the Program was updated to 2060, we also adhere to achieving this goal by 2031, and also set a target by 2060 of 52 tons of CO2-eq /thousand tons of oil by 2060.

(7.53.2.86) Target objective

The target of carbon intensity reduction by 10% by 2031 has been set for midstream facilities in Kazakhstan. According to the Low-Carbon Development Program, the emission reduction targets only account for tons of CO2. These targets were set in the low-carbon development program in 2021, until 2031. In 2024, when the Program was updated to 2060, we also adhere to achieving this goal by 2031, and also set a target by 2060 of 52 tons of CO2-eq /thousand tons of oil by 2060.

(7.53.2.87) Plan for achieving target, and progress made to the end of the reporting year

The target has not been reached yet. But we make efforts every year to achieve this. 2024 Results: ● KMG's Low-Carbon Development Program through 2060 was approved; ● Corporate methodology for GHG emissions monitoring and reporting was updated to include Scope 1, 2, and 3 emissions and approaches to inventorying, accounting, and disclosure; ● A Hydrogen Atlas was developed; a green hydrogen pilot project is underway, and lab samples of iron and titanium alloys for hydrogen storage were obtained; ● A feasibility study on SAF (Sustainable Aviation Fuel) production in Kazakhstan was completed with Air Astana and EBRD support; ● Sites in Pavlodar Region were identified for a forest-climate project, including a carbon sequestration assessment and working plan for green space development; ● First methane emissions report submitted to UNEP under OGMP 2.0 initiative; ● KMG specialists trained in methane leak management; field measurements conducted at two subsidiaries; ● Instruction for methane emissions management across the KMG Group was adopted; ● At COP28, KMG joined the Oil and Gas Decarbonization Charter. Key Initiatives: ● Implementation of internal carbon pricing; ● Participation in the Carbon Disclosure Project and disclosure of climate risks per TCFD; ● Methane emissions management in cooperation with Carbon Limits, IFC, and Tetra Tech Inc; ● Participant in UNEP OGMP 2.0 methane initiative; ● Signatory to the Oil and Gas; Decarbonization Charter; ● Forest-climate offset project in partnership with Chevron in Pavlodar Region. ● 70 activities were implemented under the Low-Carbon Development Plan; ● Annual savings of fuel and energy resources amounted to 2.36 million GJ, equivalent to a reduction of

174.9 thousand tonnes of CO_2 emissions; ● Energy consumption at production facilities was optimized through equipment upgrades and automation of technological processes.

(7.53.2.88) Target derived using a sectoral decarbonization approach

Select from:

☑ Yes

Row 5

(7.53.2.1) Target reference number

Select from:

☑ Int 5

(7.53.2.2) Is this a science-based target?

Select from:

☑ No, and we do not anticipate setting one in the next two years

(7.53.2.5) Date target was set

11/12/2024

(7.53.2.6) Target coverage

Select from:

☑ Business activity

(7.53.2.7) Greenhouse gases covered by target

Select all that apply

☑ Methane (CH4)

(7.53.2.8) Scopes

Select all that apply

☑ Scope 1

(7.53.2.11) Intensity metric

Select from:

☑ Other, please specify :T.CH4 / thousand tons of oil equivalent

(7.53.2.12) End date of base year

12/30/2019

(7.53.2.13) Intensity figure in base year for Scope 1

3.28

(7.53.2.33) Intensity figure in base year for all selected Scopes

3.2800000000

(7.53.2.34) % of total base year emissions in Scope 1 covered by this Scope 1 intensity figure

80

(7.53.2.54) % of total base year emissions in all selected Scopes covered by this intensity figure

80

(7.53.2.55) End date of target

12/30/2031

(7.53.2.56) Targeted reduction from base year (%)

50

(7.53.2.57) Intensity figure at end date of target for all selected Scopes

1.6400000000

(7.53.2.58) % change anticipated in absolute Scope 1+2 emissions

50

(7.53.2.60) Intensity figure in reporting year for Scope 1

5.05

(7.53.2.80) Intensity figure in reporting year for all selected Scopes

5.0500000000

(7.53.2.81) Land-related emissions covered by target

Select from:

☑ No, it does not cover any land-related emissions (e.g. non-FLAG SBT)

(7.53.2.82) % of target achieved relative to base year

-107.93

(7.53.2.83) Target status in reporting year

Select from:

☑ Underway

(7.53.2.85) Explain target coverage and identify any exclusions

The target for reducing methane intensity was set for the first time in 2024 (base year 2019). It covers only the company's oil production assets. By 2031, it is planned to reduce methane emissions to 1.6 tons of CH4 / thousand tons of oil equivalent, and by 2060 - 0.29 tons of CH4 / thousand tons of oil equivalent.

(7.53.2.86) Target objective

The target for reducing methane intensity was set for the first time in 2024 (base year 2019). It covers only the company's oil production assets. By 2031, it is planned to reduce methane emissions to 1.6 tons of CH4 / thousand tons of oil equivalent, and by 2060 - 0.29 tons of CH4 / thousand tons of oil equivalent.

(7.53.2.87) Plan for achieving target, and progress made to the end of the reporting year

Work done in 2024: ● In May 2024, KMG submitted its first methane emissions reports under the OGMP 2.0 for 2023 and in May 2025 for 2024. ● Conducted jointly with IFC and Carbon Limits methodological support for the preparation of reports. ● In June 2024, Tetra Tech ES, Inc. carried out a measurement campaign at the facilities of JSC Ozenmunaigas and KazGPZ LLP. ● A number of trainings and seminars on monitoring and elimination technologies have been organized methane leaks for production personnel

(7.53.2.88) Target derived using a sectoral decarbonization approach

Select from:

☑ Yes

[Add row]

(7.54) Did you have any other climate-related targets that were active in the reporting year?

Select all that apply

☑ Targets to increase or maintain low-carbon energy consumption or production

☑ Other climate-related targets

(7.54.1) Provide details of your targets to increase or maintain low-carbon energy consumption or production.

Row 1

(7.54.1.1) Target reference number

Select from:

☑ Low 1

(7.54.1.2) Date target was set

11/12/2024

(7.54.1.3) Target coverage

Select from:

☑ Country/area/region

(7.54.1.4) Target type: energy carrier

Select from:

☑ Electricity

(7.54.1.5) Target type: activity

Select from:

☑ Consumption

(7.54.1.6) Target type: energy source

Select from:

☑ Renewable energy source(s) only

(7.54.1.7) End date of base year

12/30/2019

(7.54.1.8) Consumption or production of selected energy carrier in base year (MWh)

211

(7.54.1.9) % share of low-carbon or renewable energy in base year

0.01

(7.54.1.10) End date of target

12/30/2031

(7.54.1.11) % share of low-carbon or renewable energy at end date of target

15

(7.54.1.12) % share of low-carbon or renewable energy in reporting year

4

(7.54.1.13) % of target achieved relative to base year

26.62

(7.54.1.14) Target status in reporting year

Select from:

☑ Underway

(7.54.1.16) Is this target part of an emissions target?

Yes, the construction of at least 300 MW of renewable energy will allow KMG to get credit for 0.6 million tons of CO2 emissions, which will ensure that by 2031 the target of a 15% reduction in carbon dioxide emissions from 2019 levels will be met. KMG is currently collaborating with our partners to construct two RES objects with a total capacity of 1,247 GW.W

(7.54.1.17) Is this target part of an overarching initiative?

Select all that apply

☑ No, it's not part of an overarching initiative

(7.54.1.19) Explain target coverage and identify any exclusions

This target takes into account the consumption of energy from renewable sources by our assets in Kazakhstan, which are under our operational control.

(7.54.1.20) Target objective

This target considers the consumption of energy from renewable sources by our assets in Kazakhstan, which are under our operational control.

(7.54.1.21) Plan for achieving target, and progress made to the end of the reporting year

KMG is implementing large-scale renewable energy projects (RES) to replace traditional carbonintensive energy sources and increase the share of clean energy in the energy mix. Key projects: ● Construction of a 1 GW wind power plant with an energy storage system (Zhambyl region) – partner: Total Eren, implementation period: 2023–2027; ● 247 MW hybrid renewable power plant in Zhanaozen (Mangystau region) – partner: Eni S.p.A, implementation period: 2023–2026. Work completed in 2024: ● Feasibility studies for the projects were completed; ● Wind potential in the Zhambyl region was assessed; ● Work is underway to select the main equipment supplier for the wind power plant; ● In December 2024, early works were completed at the solar power plant site, and installation of major equipment began.

Row 2

(7.54.1.1) Target reference number

Select from:

☑ Low 1

(7.54.1.2) Date target was set

11/12/2024

(7.54.1.3) Target coverage

Select from:

☑ Country/area/region

(7.54.1.4) Target type: energy carrier

Select from:

☑ Electricity

(7.54.1.5) Target type: activity

Select from:

☑ Consumption

(7.54.1.6) Target type: energy source

Select from:

☑ Renewable energy source(s) only

(7.54.1.7) End date of base year

12/30/2019

(7.54.1.8) Consumption or production of selected energy carrier in base year (MWh)

211

(7.54.1.9) % share of low-carbon or renewable energy in base year

0.01

(7.54.1.10) End date of target

12/30/2060

(7.54.1.11) % share of low-carbon or renewable energy at end date of target

50

(7.54.1.12) % share of low-carbon or renewable energy in reporting year

4

(7.54.1.13) % of target achieved relative to base year

7.98

(7.54.1.14) Target status in reporting year

Select from:

☑ Underway

(7.54.1.16) Is this target part of an emissions target?

Yes, the construction of at least 300 MW of renewable energy facilities will allow KMG to receive a credit of 0.6 million tons of CO2 emissions, which will ensure that by 2031 the target for reducing carbon dioxide emissions by 15% from the 2019 level is achieved. Currently, KMG, together with its partners, is building two renewable energy facilities with a total capacity of 1,247 GW. As for the target by 2060, we take into account the growth in the share of renewable energy production in Kazakhstan, in accordance with the Strategy for Achieving Carbon Neutrality in Kazakhstan by 2060.

(7.54.1.17) Is this target part of an overarching initiative?

Select all that apply

☑ No, it's not part of an overarching initiative

(7.54.1.19) Explain target coverage and identify any exclusions

This target takes into account the consumption of energy from renewable sources by our assets in Kazakhstan, which are under our operational control.

(7.54.1.20) Target objective

This target takes into account the consumption of energy from renewable sources by our assets in Kazakhstan, which are under our operational control.

(7.54.1.21) Plan for achieving target, and progress made to the end of the reporting year

KMG is implementing large-scale renewable energy projects (RES) to replace traditional carbonintensive energy sources and increase the share of clean energy in the energy mix. Key projects: ● Construction of a 1 GW wind power plant with an energy storage system (Zhambyl region) – partner: Total Eren, implementation period: 2023–2027; ● 247 MW hybrid renewable power plant in Zhanaozen (Mangystau region) – partner: Eni S.p.A, implementation period: 2023–2026. Work completed in 2024: ● Feasibility studies for the projects were completed; ● Wind potential in the Zhambyl region was assessed; ● Work is underway to select the main equipment supplier for the wind power plant; ● In December 2024, early works were completed at the solar power plant site, and installation of major equipment began.
[Add row]

(7.54.2) Provide details of any other climate-related targets, including methane reduction targets.

Row 1

(7.54.2.1) Target reference number

Select from:

☑ Oth 1

(7.54.2.2) Date target was set

11/03/2021

(7.54.2.3) Target coverage

Select from:

☑ Business activity

(7.54.2.4) Target type: absolute or intensity

Select from:

☑ Intensity

(7.54.2.5) Target type: category & metric (target numerator if reporting an intensity target)

Energy consumption or efficiency

☑ Other energy consumption or efficiency, please specify :MJ

(7.54.2.6) Target denominator (intensity targets only)

Select from:

☑ toe

(7.54.2.7) End date of base year

12/30/2019

(7.54.2.8) Figure or percentage in base year

2225

(7.54.2.9) End date of target

12/30/2031

(7.54.2.10) Figure or percentage at end of date of target

1810

(7.54.2.11) Figure or percentage in reporting year

2544

(7.54.2.12) % of target achieved relative to base year

-76.8674698795

(7.54.2.13) Target status in reporting year

Select from:

☑ Underway

(7.54.2.15) Is this target part of an emissions target?

No

(7.54.2.16) Is this target part of an overarching initiative?

Select all that apply

☑ No, it's not part of an overarching initiative

(7.54.2.18) Please explain target coverage and identify any exclusions

The target of energy intensity reduction by 10% by 2031 has been set for upstream sector facilities in Kazakhstan, which are under our operational control. The target was set back in 2021 in the first low-carbon development program until 2031. In 2024, we recalculated some indicators of the base year in terms of intensity, and set targets by 2060 (573 MJ/ton of hydrocarbons), leaving the intermediate target by 2031. The targets have not been reached yet, but we make efforts every year to achieve them.

(7.54.2.19) Target objective

The target of energy intensity reduction by 10% by 2031

(7.54.2.20) Plan for achieving target, and progress made to the end of the reporting year

Work completed in 2024: ● 70 activities were implemented under the Low-Carbon Development Plan; ● Annual savings of fuel and energy resources amounted to 2.36 million GJ, equivalent to a reduction of 174.9 thousand tonnes of CO_2 emissions; ● Energy consumption at production facilities was optimized through equipment upgrades and automation of technological processes.

Row 2

(7.54.2.1) Target reference number

Select from:

☑ Oth 2

(7.54.2.2) Date target was set

11/03/2021

(7.54.2.3) Target coverage

Select from:

☑ Business activity

(7.54.2.4) Target type: absolute or intensity

Select from:

☑ Intensity

(7.54.2.5) Target type: category & metric (target numerator if reporting an intensity target)

Resource consumption or efficiency

☑ Other resource consumption or efficiency, please specify :MJ

(7.54.2.6) Target denominator (intensity targets only)

Select from:

☑ toe

(7.54.2.7) End date of base year

12/30/2019

(7.54.2.8) Figure or percentage in base year

3580

(7.54.2.9) End date of target

12/30/2031

(7.54.2.10) Figure or percentage at end of date of target

3164

(7.54.2.11) Figure or percentage in reporting year

3310

(7.54.2.12) % of target achieved relative to base year

64.9038461538

(7.54.2.13) Target status in reporting year

Select from:

☑ Underway

(7.54.2.15) Is this target part of an emissions target?

no

(7.54.2.16) Is this target part of an overarching initiative?

Select all that apply

☑ No, it's not part of an overarching initiative

(7.54.2.18) Please explain target coverage and identify any exclusions

The target of energy intensity reduction by 10% by 2031 has been set for 3 large refineries in Kazakhstan. The target was set back in 2021 in the first low-carbon development program until 2031. In 2024, we recalculated some indicators of the base year in terms of intensity, and set targets by 2060 (3164 MJ/ton of oil), leaving the intermediate target by 2031. The targets have not been reached yet, but we make efforts every year to achieve them

(7.54.2.19) Target objective

The target of energy intensity reduction by 10% by 2031

(7.54.2.20) Plan for achieving target, and progress made to the end of the reporting year

Work completed in 2024: ● 70 activities were implemented under the Low-Carbon Development Plan; ● Annual savings of fuel and energy resources amounted to 2.36 million GJ, equivalent to a reduction of 174.9 thousand tonnes of CO_2 emissions; ● Energy consumption at production facilities was optimized through equipment upgrades and automation of technological processes.

Row 3

(7.54.2.1) Target reference number

Select from:

☑ Oth 3

(7.54.2.2) Date target was set

11/03/2021

(7.54.2.3) Target coverage

Select from:

☑ Business activity

(7.54.2.4) Target type: absolute or intensity

Select from:

☑ Intensity

(7.54.2.5) Target type: category & metric (target numerator if reporting an intensity target)

Energy consumption or efficiency

☑ Other energy consumption or efficiency, please specify :MJ

(7.54.2.6) Target denominator (intensity targets only)

Select from:

☑ toe

(7.54.2.7) End date of base year

12/30/2019

(7.54.2.8) Figure or percentage in base year

650.1

(7.54.2.9) End date of target

12/30/2031

(7.54.2.10) Figure or percentage at end of date of target

550

(7.54.2.11) Figure or percentage in reporting year

908

(7.54.2.12) % of target achieved relative to base year

-257.6423576424

(7.54.2.13) Target status in reporting year

Select from:

☑ Underway

(7.54.2.15) Is this target part of an emissions target?

no

(7.54.2.16) Is this target part of an overarching initiative?

Select all that apply

☑ No, it's not part of an overarching initiative

(7.54.2.18) Please explain target coverage and identify any exclusions

The target of energy intensity reduction by 10% by 2031 has been set for bitumen production facility in Kazakstan. The target was set back in 2021 in the first low-carbon development program until 2031. In 2024, we recalculated some indicators of the base year in terms of intensity, and set targets by 2060 (550 MJ/ton of oil), leaving the intermediate target by 2031. The targets have not been reached yet, but we make efforts every year to achieve them

(7.54.2.19) Target objective

The target of energy intensity reduction by 10% by 2031

(7.54.2.20) Plan for achieving target, and progress made to the end of the reporting year

Work completed in 2024: ● 70 activities were implemented under the Low-Carbon Development Plan; ● Annual savings of fuel and energy resources amounted to 2.36 million GJ, equivalent to a reduction of 174.9 thousand tonnes of CO_2 emissions; ● Energy consumption at production facilities was optimized through equipment upgrades and automation of technological processes.

Row 4

(7.54.2.1) Target reference number

Select from:

☑ Oth 4

(7.54.2.2) Date target was set

11/03/2021

(7.54.2.3) Target coverage

Select from:

☑ Business activity

(7.54.2.4) Target type: absolute or intensity

Select from:

☑ Intensity

(7.54.2.5) Target type: category & metric (target numerator if reporting an intensity target)

Energy consumption or efficiency

☑ Other energy consumption or efficiency, please specify :cubic meters of gas

(7.54.2.6) Target denominator (intensity targets only)

Select from:

☑ toe

(7.54.2.7) End date of base year

12/30/2019

(7.54.2.8) Figure or percentage in base year

3296.5

(7.54.2.9) End date of target

12/30/2031

(7.54.2.10) Figure or percentage at end of date of target

2607

(7.54.2.11) Figure or percentage in reporting year

3568

(7.54.2.12) % of target achieved relative to base year

-39.3763596809

(7.54.2.13) Target status in reporting year

Select from:

☑ Underway

(7.54.2.15) Is this target part of an emissions target?

NO

(7.54.2.16) Is this target part of an overarching initiative?

Select all that apply

☑ No, it’s not part of an overarching initiative

(7.54.2.18) Please explain target coverage and identify any exclusions

The target of energy intensity reduction by 10% by 2031 has been set for gas processing plant in Kazakhstan. The target was set back in 2021 in the first low-carbon development program until 2031. In 2024, we recalculated some indicators of the base year in terms of intensity. The targets have not been reached yet, but we make efforts every year to achieve them

(7.54.2.19) Target objective

The target of energy intensity reduction by 10% by 2031

(7.54.2.20) Plan for achieving target, and progress made to the end of the reporting year

Work completed in 2024: ● 70 activities were implemented under the Low-Carbon Development Plan; ● Annual savings of fuel and energy resources amounted to 2.36 million GJ, equivalent to a reduction of 174.9 thousand tonnes of CO_2 emissions; ● Energy consumption at production facilities was optimized through equipment upgrades and automation of technological processes.

Row 5

(7.54.2.1) Target reference number

Select from:

☑ Oth 5

(7.54.2.2) Date target was set

11/03/2021

(7.54.2.3) Target coverage

Select from:

☑ Business activity

(7.54.2.4) Target type: absolute or intensity

Select from:

☑ Intensity

(7.54.2.5) Target type: category & metric (target numerator if reporting an intensity target)

Energy consumption or efficiency

☑ Other energy consumption or efficiency, please specify :MJ

(7.54.2.6) Target denominator (intensity targets only)

Select from:

☑ toe

(7.54.2.7) End date of base year

12/30/2019

(7.54.2.8) Figure or percentage in base year

120.9

(7.54.2.9) End date of target

12/30/2031

(7.54.2.10) Figure or percentage at end of date of target

91

(7.54.2.11) Figure or percentage in reporting year

93

(7.54.2.12) % of target achieved relative to base year

93.3110367893

(7.54.2.13) Target status in reporting year

Select from:

☑ Underway

(7.54.2.15) Is this target part of an emissions target?

No

(7.54.2.16) Is this target part of an overarching initiative?

Select all that apply

☑ No, it's not part of an overarching initiative

(7.54.2.18) Please explain target coverage and identify any exclusions

The target of energy intensity reduction by 10% by 2031 has been set for midstream assets in Kazakhstan. The target was set back in 2021 in the first low-carbon development program until 2031. In 2024, we recalculated some indicators of the base year in terms of intensity, and set targets by 2060 (50 MJ/ton of oil), leaving the intermediate target by 2031. The targets have not been reached yet, but we make efforts every year to achieve them

(7.54.2.19) Target objective

The target of energy intensity reduction by 10% by 2031

(7.54.2.20) Plan for achieving target, and progress made to the end of the reporting year

Work completed in 2024: ● 70 activities were implemented under the Low-Carbon Development Plan; ● Annual savings of fuel and energy resources amounted to 2.36 million GJ, equivalent to a reduction of 174.9 thousand tonnes of CO_2 emissions; ● Energy consumption at production facilities was optimized through equipment upgrades and automation of technological processes.
[Add row]

(7.54.4) Indicate which targets reported in 7.53.1/2 incorporate methane emissions, or if you do not have a methane-specific emissions reduction target for your oil and gas activities, please explain why not and forecast how your methane emissions will change over the next five years.

We have set targets to reduce methane emissions both in absolute value and intensity. In absolute terms, emissions should be reduced by 32% by 2031 and by 96% by 2060 from the 2019 baseline level. In terms of intensity, emissions should be reduced to 1.6 tons of methane per thousand tons of oil equivalent by 2031, to 0.29 tons of methane per thousand tons of oil equivalent by 2060 from the base level of 3.28 tons of methane per thousand tons of oil equivalent in 2019. We assume that emissions may increase in the next 5 years, due to the inventory of emissions. At the same time, we hope to reduce emissions through the introduction of LDAR in the next 2 years.

(7.55) Did you have emissions reduction initiatives that were active within the reporting year? Note that this can include those in the planning and/or implementation phases.

Select from:

☑ Yes

(7.55.1) Identify the total number of initiatives at each stage of development, and for those in the implementation stages, the estimated CO2e savings.

	Number of initiatives	Total estimated annual CO2e savings in metric tonnes CO2e
Under investigation	*0*	*`Numeric input*
To be implemented	*0*	*0*
Implementation commenced	*0*	*0*
Implemented	*70*	*174900*
Not to be implemented	*0*	*`Numeric input*

[Fixed row]

(7.55.2) Provide details on the initiatives implemented in the reporting year in the table below.

Row 1

(7.55.2.1) Initiative category & Initiative type

Energy efficiency in production processes

☑ Process optimization

(7.55.2.2) Estimated annual CO2e savings (metric tonnes CO2e)

174900

(7.55.2.3) Scope(s) or Scope 3 category(ies) where emissions savings occur

Select all that apply

☑ Scope 1

☑ Scope 2 (location-based)

(7.55.2.4) Voluntary/Mandatory

Select from:

☑ Mandatory

(7.55.2.5) Annual monetary savings (unit currency – as specified in 1.2)

12635751

(7.55.2.6) Investment required (unit currency – as specified in 1.2)

12635571

(7.55.2.7) Payback period

Select from:

☑ 4-10 years

(7.55.2.8) Estimated lifetime of the initiative

Select from:

☑ 11-15 years

(7.55.2.9) Comment

In 2024, the KMG Group implemented 70 equipment modernization measures, including: ● Replacement of gas burners in process furnaces ● Introduction of energy-saving technologies ● Optimization of thermal energy generation and consumption ● Modernization of lighting systems Economic and environmental impact: ● Annual energy savings — 2,361 thousand. GJ ● The equivalent of reducing greenhouse gas emissions is 174.9 thousand tons of co_2 The total cost of implementing energy efficiency measures in 2024 amounted to 5,930 million tenge (12 635 571 USD). The measures taken allowed not only reduce energy consumption, but also improve operational efficiency by reducing costs and minimizing environmental impacts.
[Add row]

(7.55.3) What methods do you use to drive investment in emissions reduction activities?

Row 1

(7.55.3.1) Method

Select from:

☑ Compliance with regulatory requirements/standards

(7.55.3.2) Comment

KMG's investment policy is focused on improving the Company's efficiency in all areas of its core activities by investing in effective, profitable and competitive strategic projects with a significant potential to generate free cash flow, considering the strategic objectives of the Company. The Company's tasks in support of its investment policy are: 1) Formation of an optimal and cost-effective investment portfolio of the Company focused on the achievement of the Company's Strategic Goals by ranking and balancing investment projects. 2) Increasing the level of maturity in project management by applying the Stage Gate Process and increasing control over the proper implementation of projects on time, budget, with the specified level of quality and obtaining direct financial benefits and declared results. 3) As a part of the low-carbon strategy, KMG considers any investment projects through the lens of their potential impact on reduction of the carbon footprint. New projects are evaluated by the level of profitability index for the owner (PI) (except for projects at the stage of exploration, projects implemented by order of the President or the Government of the Republic of Kazakhstan and socially important projects).

Row 2

(7.55.3.1) Method

Select from:

☑ Employee engagement

(7.55.3.2) Comment

KMG pays great attention to professional development of employees in the field of sustainable development and conducts training courses for employees of the corporate center and subsidiaries and affiliates. To implement methane management in 2024, KMG specialists were trained in methane leak management and conducted field measurements of methane leaks at two KMG subsidiaries.

Row 3

(7.55.3.1) Method

Select from:

☑ Partnering with governments on technology development

(7.55.3.2) Comment

In 2022, the Ministry of Energy of the Republic of Kazakhstan, Samruk-Kazyna JSC, KazMunayGas JSC NC and Total Eren S.A signed an Agreement on principles for the construction of a 1 GW wind farm (WPP) in Zhambyl region.The agreement was signed following the results of the work within the framework of the previously signed Memorandum of Understanding between the parties from 2021.

Row 4

(7.55.3.1) Method

Select from:

☑ Dedicated budget for energy efficiency

(7.55.3.2) Comment

In 2022, in accordance with the Rules for Determining the Tariff to support of renewable energy sources, our subsidiaries and affiliates purchased electric power in the amount of 11,845 thousand kW for their own needs, produced from renewable energy sources from the Financial Settlement Center for Renewable Energy LLP. Electricity generation by solar panels of subsidiaries and affiliated companies for street lighting of territories in 2022 amounted to 75 thousand kWh.

Row 5

(7.55.3.1) Method

Select from:

☑ Financial optimization calculations

(7.55.3.2) Comment

Cost-benefit analysis of greenhouse gas emission and/or energy efficiency projects is one of the methods we use to stimulate investment in emission reduction activities. This mechanism is particularly relevant for our shareholders and the Management Board, who are responsible for making decisions on cost optimization and allocation of funds. We scrutinize the economic benefits of energy efficiency projects by evaluating the payback period and return on investment. Decisions on organizational, technological or technical measures are therefore taken not only on the basis of environmental and energy performance assessments, but also with consideration of the financial benefit/loss.
[Add row]

(7.57) Describe your organization’s efforts to reduce methane emissions from your activities.

Work done in 2024: ● In May 2024, KMG submitted its first methane emissions reports under the OGMP 2.0 for 2023, and in May 2025 for 2024. ● Conducted jointly with IFC and Carbon Limits methodological support for the preparation of reports. ● In June 2024, Tetra Tech ES, Inc. carried out a measurement campaign at the facilities of JSC Ozenmunaigas and KazGPZ LLP. ● A number of trainings and seminars on monitoring and elimination technologies have been organized methane leaks for production personnel

(7.61) Does your organization conduct leak detection and repair (LDAR) or use other methods to find and fix fugitive methane emissions from oil and gas production activities?

Select from:
☑ Yes

(7.61.1) Describe the protocol through which methane leak detection and repair or other leak detection methods, are conducted for oil and gas production activities, including predominant frequency of inspections, estimates of assets covered, and methodologies employed.

Since 2014, KazMunayGas has been actively cooperating with Carbon Limits in detecting and measuring methane leaks at the production facilities of its subsidiaries and affiliates. In 2015-2016, with the participation of Carbon Limits specialists, 3 studies were conducted to detect and measure methane leaks at 4 hydraulic fracturing stations in Atyrau, Aktobe and South Kazakhstan regions. These studies have made it possible to detect and quantify methane leaks from various sources of emissions, the prevention of which can lead to potential financial savings.Unfortunately, KMG does not have a single protocol for detecting and eliminating methane leaks. However, given KMG's goals of implementing LDAR in our mining sector, such a protocol will be developed in the coming years. The company joined OGMP 2.0 in 2023 and has already submitted its first methane emissions report in 2024. In the 1st quarter of 2024, KMG, together with Carbon Limits, conducted a demonstration of LDAR at two KMG enterprises (in subsidiaries). In the second quarter of 2024, in collaboration with Tetra Tech Inc (USAID), field measurements were carried out as part of the LDAR program at two KMG facilities, after which measures were taken to reduce emissions from detected leaks. (It was not possible to estimate the amount of reduced emissions, as this was done after the end of the measurement campaign). It should also be noted that we are cooperating with IMEO, and reducing the emissions that were detected by the satellite.

(7.62) If flaring is relevant to your oil and gas production activities, describe your organization’s efforts to reduce flaring, including any flaring reduction targets.

The World Bank's initiative “Complete cessation of regular flaring of associated petroleum gas by 2030" was supported by KMG in 2015. It brings together governments, oil companies, and development organizations that are willing to work together to end the practice of regularly flaring associated petroleum gas (APG) by 2030. Our goal is to increase the efficiency of APG use and disposal and minimize flaring. We submit annual progress reports to the World Bank.Managing greenhouse gas emissions and reducing gas flaring are among the priorities of the KMG Group of Companies. In accordance with the approved environmental protection policy, the Company strives to abandon the planned flaring of gas and reduce emissions from flaring into the atmosphere. One of our most important goals in reducing greenhouse gas emissions is to increase the efficiency of using raw gas and minimize flaring. Thanks to the implemented measures of the programs for the development and processing of crude gas, the use of gas for own needs for heat and electricity generation has increased.The result of the targeted actions of the KMG Group of Companies over the period 2017-2021 was an 83% reduction in the flaring of associated petroleum gas. This has allowed us to reduce emissions of pollutants and greenhouse gases generated by the combustion and distribution of crude gas. The use of crude gas in 2024 was 98.9%. The rate of gas combustion was 1.45 tons per 1,000 tons produced of hydrocarbon raw materials (HC), which corresponds to the level of 2023 (1.4) and demonstrates decrease compared to 2022 (1.5). This indicator remains 84% below the industry average set by The International Association of Manufacturers. In accordance with our Low-Carbon Development Program approved in November 2021, KMG plans to phase out flaring along the route by 2031.

(7.73) Are you providing product level data for your organization’s goods or services?

Select from:

☑ No, I am not providing data

(7.74) Do you classify any of your existing goods and/or services as low-carbon products?

Select from:

☑ Yes

(7.74.1) Provide details of your products and/or services that you classify as low-carbon products.

Row 1

(7.74.1.1) Level of aggregation

Select from:

☑ Product or service

(7.74.1.2) Taxonomy used to classify product(s) or service(s) as low-carbon

Select from:

☑ Other, please specify :ISCC

(7.74.1.3) Type of product(s) or service(s)

Biofuels

☑ Bioethanol

(7.74.1.4) Description of product(s) or service(s)

Our Romanian refinery produces Low-carbon products, which are supplied to European markets: Euro plus 10 ppm biobenzene and Euro 5 diesel blended with biodiesel. We believe that our commitment to the production and distribution of fuels blended with biocomponents is a good start for the production of low-carbon fuels. This will minimize negative environmental and human health impacts from the use of our products. In 2018, we were very proud to receive international ISCC (International Sustainability and Carbon Certificate) certification for our biocomponent fuel. In 2024, the following quantities were sold through gas stations: 84708176 liters bioethanol

(7.74.1.5) Have you estimated the avoided emissions of this low-carbon product(s) or service(s)

Select from:

☑ Yes

(7.74.1.6) Methodology used to calculate avoided emissions

Select from:

☑ Other, please specify :GHG Protocol

(7.74.1.7) Life cycle stage(s) covered for the low-carbon product(s) or services(s)

Select from:

☑ Use stage

(7.74.1.8) Functional unit used

1 liter gasoline vs. 1 liter bioethanol

(7.74.1.9) Reference product/service or baseline scenario used

gasoline

(7.74.1.10) Life cycle stage(s) covered for the reference product/service or baseline scenario

Select from:

☑ Use stage

(7.74.1.11) Estimated avoided emissions (metric tons CO2e per functional unit) compared to reference product/service or baseline scenario

0.00213

(7.74.1.12) Explain your calculation of avoided emissions, including any assumptions

Our company evaluates indirect greenhouse gas (GHG) emissions under Scope 3 in accordance with the Greenhouse Gas Protocol (GHG Protocol). Within Category 11, "Use of Sold Products," we can assess the avoided GHG emissions resulting from the use of biofuels by utilizing the emission factors specified in the technical documentation for the biofuels.

(7.74.1.13) Revenue generated from low-carbon product(s) or service(s) as % of total revenue in the reporting year

0

Row 2

(7.74.1.1) Level of aggregation

Select from:

☑ Product or service

(7.74.1.2) Taxonomy used to classify product(s) or service(s) as low-carbon

Select from:

☑ Other, please specify :ISCC

(7.74.1.3) Type of product(s) or service(s)

Biofuels

☑ Other, please specify :Biodiesel

(7.74.1.4) Description of product(s) or service(s)

Our Romanian refinery produces Low-carbon products, which are supplied to European markets: Euro plus 10 ppm biobenzene and Euro 5 diesel blended with biodiesel. We believe that our commitment to the production and distribution of fuels blended with biocomponents is a good start for the production of low-carbon fuels. This will minimize negative environmental and human health impacts from the use of our products. In 2018, we were very proud to receive international ISCC (International Sustainability and Carbon Certificate) certification for our biocomponent fuel. In 2024, the following quantities were sold through gas stations: 268820103 liters of biodiesel

(7.74.1.5) Have you estimated the avoided emissions of this low-carbon product(s) or service(s)

Select from:

☑ Yes

(7.74.1.6) Methodology used to calculate avoided emissions

Select from:

☑ Other, please specify :GHG Protocol

(7.74.1.7) Life cycle stage(s) covered for the low-carbon product(s) or services(s)

Select from:

☑ Use stage

(7.74.1.8) Functional unit used

1 liter diesel vs. 1 liter biodiesel

(7.74.1.9) Reference product/service or baseline scenario used

diesel

(7.74.1.10) Life cycle stage(s) covered for the reference product/service or baseline scenario

Select from:

☑ Use stage

(7.74.1.11) Estimated avoided emissions (metric tons CO2e per functional unit) compared to reference product/service or baseline scenario

0.00188

(7.74.1.12) Explain your calculation of avoided emissions, including any assumptions

Our company evaluates indirect greenhouse gas (GHG) emissions under Scope 3 in accordance with the Greenhouse Gas Protocol (GHG Protocol). Within Category 11, "Use of Sold Products," we can assess the avoided GHG emissions resulting from the use of biofuels by utilizing the emission factors specified in the technical documentation for the biofuels.

(7.74.1.13) Revenue generated from low-carbon product(s) or service(s) as % of total revenue in the reporting year

0

[Add row]

(7.79) Has your organization retired any project-based carbon credits within the reporting year?

Select from:

☑ No

C9. Environmental performance - Water security

(9.1) Are there any exclusions from your disclosure of water-related data?

Select from:

☑ No

(9.2) Across all your operations, what proportion of the following water aspects are regularly measured and monitored?

Water withdrawals – total volumes

(9.2.1) % of sites/facilities/operations

Select from:

☑ 100%

(9.2.2) Frequency of measurement

Select from:

☑ Continuously

(9.2.3) Method of measurement

Water withdrawals are regularly monitored with flow meters.

(9.2.4) Please explain

According to the legislation of the Republic of Kazakhstan and international legislations (Romania and Georgia), for the withdrawal of water from natural water sources, the Company has permits regulating the volume of the total volume of withdrawn water in accordance with the purposes, conditions and time of water intake. Monitoring and control of the volume of water consumed is carried out within the framework of the requirements of the legislation of the Republic of Kazakhstan. Water consumption is measured continuously at each water intake facility. The activities of the KMG Group of Companies regarding the use of water resources are consolidated in the corporate center. Quantitative data of KMG subsidiaries and affiliates on water intake is provided quarterly to KMG for consolidation and analysis through the corporate management information system.

Water withdrawals – volumes by source

(9.2.1) % of sites/facilities/operations

Select from:

☑ 100%

(9.2.2) Frequency of measurement

Select from:

☑ Continuously

(9.2.3) Method of measurement

Water withdrawals- volumes by source are monitored by flow meters

(9.2.4) Please explain

The company monitors water intakes from various sources, such as underground sources (wells, aquifers), surface sources (sea, rivers, lakes, reservoirs and canals) and urban water supply systems. It is important to note that water consumption is recorded without distinction between primary and secondary consumers.

Produced water associated with your oil & gas sector activities - total volumes

(9.2.1) % of sites/facilities/operations

Select from:

☑ 100%

(9.2.2) Frequency of measurement

Select from:

☑ Continuously

(9.2.3) Method of measurement

Produced water is monitored by flow meters.

(9.2.4) Please explain

The oil production process generates large volumes of so-called associated reservoir water – an oil-water emulsion is brought to the surface, which is subsequently separated into waterand oil by gravity. Water settled in this way is fed for reinjection into the reservoir.

Water withdrawals quality

(9.2.1) % of sites/facilities/operations

Select from:

☑ 100%

(9.2.2) Frequency of measurement

Select from:

☑ Continuously

(9.2.3) Method of measurement

Quality of water withdrawals is measured for certain parameters by standard analytical methods.

(9.2.4) Please explain

In accordance with the requirements of legislation regulating the protection of water resources, as well as in order to protect the rights and interests of water users in the affected area of the withdrawn water, KMG carries out accounting, monitoring and reporting on the quality of water intake. A unified classification of water quality is provided for enterprises in the Republic of Kazakhstan, including the following categories: • Ballast water, bilge water • Drinking water • Process water • Sewage water • Underground drinking water • Underground process water • Collector-drainage water • Sea water • Water from rice systems • Mine water • Transit water

Water discharges – total volumes

(9.2.1) % of sites/facilities/operations

Select from:

☑ 100%

(9.2.2) Frequency of measurement

Select from:

☑ Continuously

(9.2.3) Method of measurement

Water discharges are regularly monitored with flow meters.

(9.2.4) Please explain

In accordance with the legislation of the Republic of Kazakhstan, the KMG group of companies, which discharges water, keeps records and monitors the discharged water in accordance with the obtained permits: permission to influence (discharge of pollutants) and permission for special water use (discharge). All industrial and domestic wastewater passes through mechanical, biological and chemical treatment. Petromedia Refinery - the concentrations of pollutants in the discharged wastewater are subject to detailed and systematic monitoring, in accordance wirh the regulations specified in the Water Management Permit (by the National Administration "Apele Romane"), as well as the provisions of the Intergated Environmental Permit (by the Constanta Environmental Protection Agency). Water quality analyses are conducted by an ISO 17025 accredited laboratory.

Water discharges – volumes by destination

(9.2.1) % of sites/facilities/operations

Select from:

☑ 100%

(9.2.2) Frequency of measurement

Select from:

☑ Continuously

(9.2.3) Method of measurement

Total volume of water discharges is continuously monitored with flow meters. Transfer to specialized companies continuously monitored with flow meters.

(9.2.4) Please explain

In accordance with the legal requirements, the design documentation of companies considers the entire list of facilities to which sewage water is discharged. The companies keep track of and monitor sewage water volumes. Information on water discharge is consolidated in the corporate center of KMG on a quarterly basis, analysis and accounting are carried out. All information on the volumes of water discharged is disclosed in the corporate reports of KMG. The main receiver (and end

point) of sewage water from KMG enterprises are various specialized receivers: storage ponds, evaporation fields. These facilities are technical structures designed for natural water treatment and prevention of environmental pollution. Enterprises that do not have their own storage facilities transfer wastesewage water to specialized companies for treatment and disposal.

Water discharges – volumes by treatment method

(9.2.1) % of sites/facilities/operations

Select from:

☑ 100%

(9.2.2) Frequency of measurement

Select from:

☑ Continuously

(9.2.3) Method of measurement

Monitored with flow meters

(9.2.4) Please explain

Careful attitude to water bodies and water facilities and prevention of harm to them is the fundamental principle in relation to water bodies for KMG enterprises. To bring the water parameters up to the safe standards established by law, three main methods of treatment are used: biological, physicochemical and mechanical, in accordance with which accounting and reporting on the parameters and volumes of discharged water is kept. At refineries, wastewater is treated separately in parallel mechanically and physicochemically in sand traps, oil traps, radial sedimentation tanks and flotators. The treated industrial effluents after the flotators are fed to biological treatment

Water discharge quality – by standard effluent parameters

(9.2.1) % of sites/facilities/operations

Select from:

☑ 100%

(9.2.2) Frequency of measurement

Select from:

☑ Quarterly

(9.2.3) Method of measurement

The quality of water discharges is carried out with the involvement of an accredited laboratory on the basis of the approved Program of Industrial Environmental Control (PIEC). All effluent parameters are analyzed with standard methods.

(9.2.4) Please explain

The quality of wastewater is analyzed in accordance with the established standards on a regular basis. Production control over compliance with the maximum permissible discharge (MPD) standards is carried out by an accredited laboratory. During production control, the following are subject to verification: compliance with the requirements of legislative, regulatory documents and other accepted requirements in the company; fulfilment of instructions, orders, directions and acts of inspections of production control for environmental protection; accounting of the volumes of water taken, used water and effluents and their compliance with the established limits; composition and the property of wastewater and its compliance with the established discharge standards (MPD): suspended solids, ammonium nitrogen, nitrates, nitrites, complete BOD, COD, sulfates, chlorides, oil products, phenols, phosphates, surfactants, petroleum products, iron.

Water discharge quality – emissions to water (nitrates, phosphates, pesticides, and/or other priority substances)

(9.2.1) % of sites/facilities/operations

Select from:

☑ 100%

(9.2.2) Frequency of measurement

Select from:

☑ Quarterly

(9.2.3) Method of measurement

The quality of water discharges is carried out with the involvement of an accredited laboratory on the basis of the approved Program of Industrial Environmental Control (PIEC). Nitrates, phosphates are analyzed with standard methods

(9.2.4) Please explain

In the KMG Group of Companies, the content of nitrates and phosphates in wastewater is 1% of the total volume of pollutants that are discharged into evaporation fields and storage facilities. Regular analyses are carried out in accordance with established standards. Production control over compliance with the maximum permissible emissions is carried out by an accredited laboratory. Pesticides are not used in the company's activities, and their presence is absent. Petromidia Refinery - the detailed monitoring and treatment processes have kept hydrocarbon discharges at levels below the detection limtit, demostrating effective management of potential pollutants. Trends in hydrocarbon discharges into water have been closely monitored.

Water discharge quality – temperature

(9.2.1) % of sites/facilities/operations

Select from:

☑ 100%

(9.2.2) Frequency of measurement

Select from:

☑ Continuously

(9.2.3) Method of measurement

Temperature of water discharges is measured using a thermometer

(9.2.4) Please explain

The requirement to control the temperature of the discharged water is fixed at the legislative level. The environmental legislation of the Republic of Kazakhstan prohibits the discharge of water the temperature of which exceeds 30 degrees Celsius to ensure the safe functioning of aquatic flora and fauna within the affected area of wastewater discharge.
[Fixed row]

(9.2.2) What are the total volumes of water withdrawn, discharged, and consumed across all your operations, how do they compare to the previous reporting year, and how are they forecasted to change?

Total withdrawals

(9.2.2.1) Volume (megaliters/year)

238386.87

(9.2.2.2) Comparison with previous reporting year

Select from:

☑ Higher

(9.2.2.3) Primary reason for comparison with previous reporting year

Select from:

☑ Increase/decrease in business activity

(9.2.2.4) Five-year forecast

Select from:

☑ Lower

(9.2.2.5) Primary reason for forecast

Select from:

☑ Investment in water-smart technology/process

(9.2.2.6) Please explain

In 2024, the total volume of water intake by KMG Group was 238 million m³, including produced water. The main sources are surface, underground, sea and produced (associated formation) water. The volume also includes produced (140795.9 m3) water. In order to improve the efficiency of water resources use, reduce the volume of fresh water consumption, increase the volume of recycling and reuse of treated wastewater, the following actions are being taken and are planned to be taken on a permanent basis in KMG SDEs: - update, reconstruction of existing units for mechanical, chemical and biological treatment of domestic wastewater, replacement of old treatment equipment with more modern modular units; - design of works to reconstruct evaporation f ields; - retrofitting of treatment plants with additional technologies (reverse osmosis), which will subsequently make it possible to use this water to produce steam for industrial needs; - replacement of old drinking water pipelines with new ones to reduce leaks and process losses of fresh drinking water; - reconstruction of mechanical treatment facilities (MTF) within the framework of the TAZALYQ project, which will increase the capacity of MTF by 2 times and achieve the maximum permissible discharge limits for the content of oil products and suspended solids in wastewater sent to the biological treatment unit - reconstruction of regulatory treated effluent canal and reclamation of Atyrau Refinery evaporation fields; - construction of a wastewater post-treatment unit using reverse osmosis under the TAZALYQ project; - complete reconstruction and update of the system of wastewater treatment facilities of PetroKazakhstan Oil Products LLP, subsequently the efficiency of industrial wastewater treatment for oil products and suspended solids was improved from 76 to 98%, which reduced the environmental load by reducing air emissions.

Total discharges

(9.2.2.1) Volume (megaliters/year)

24769.93

(9.2.2.2) Comparison with previous reporting year

Select from:

☑ Higher

(9.2.2.3) Primary reason for comparison with previous reporting year

Select from:

☑ Increase/decrease in business activity

(9.2.2.4) Five-year forecast

Select from:

☑ Lower

(9.2.2.5) Primary reason for forecast

Select from:

☑ Investment in water-smart technology/process

(9.2.2.6) Please explain

Wastewater levels in 2024 increased compared to 2023.

Total consumption

(9.2.2.1) Volume (megaliters/year)

238386.87

(9.2.2.2) Comparison with previous reporting year

Select from:

☑ Higher

(9.2.2.3) Primary reason for comparison with previous reporting year

Select from:

☑ Increase/decrease in business activity

(9.2.2.4) Five-year forecast

Select from:

☑ Lower

(9.2.2.5) Primary reason for forecast

Select from:

☑ Investment in water-smart technology/process

(9.2.2.6) Please explain

Re-treated water is used for vehicle washing, dust suppression and replenishment of fire-fighting systems. At the same time, a significant amount of treated waste sewage water is reused, mainly at refineries. The volume includes are the produced water injected into the reservoir in order to enhance oil recovery. In order to decrease the volume of freshwater withdrawal in KMG Group downstream activity we plan to construct the installation of additional wastewater treatment; the seawater desalination plant was constructed in upstream which will release the volume of Volga water for the development of the region in the amount of at least 6.2 million m3/year.
[Fixed row]

(9.2.3) In your oil & gas sector operations, what are the total volumes of water withdrawn, discharged, and consumed (by business division), how do they compare to the previous reporting year, and how are they forecasted to change?

Total withdrawals – upstream

(9.2.3.1) Volume (megaliters/year)

40961.25

(9.2.3.2) Comparison with previous reporting year

Select from:

☑ Higher

(9.2.3.3) Primary reason for comparison with previous reporting year

Select from:

☑ Increase/decrease in business activity

(9.2.3.4) Five-year forecast

Select from:

☑ Lower

(9.2.3.5) Primary reason for forecast

Select from:

☑ Investment in water-smart technology/process

(9.2.3.6) Please explain

An increase in the volume of waterwithdrawals was recorded at one of the upstream assets in connection with the increase in the operating fund of injection wells and the launch of additional units, which are aimed at increasing and restoring production at the fields. In 5-years forecast the Company plan to develop and approve the Water Management Plan and according to the decelopment scenario decrease the water withdrawals.

Total discharges – upstream

(9.2.3.1) Volume (megaliters/year)

436.36

(9.2.3.2) Comparison with previous reporting year

Select from:

☑ About the same

(9.2.3.3) Primary reason for comparison with previous reporting year

Select from:

☑ Increase/decrease in business activity

(9.2.3.4) Five-year forecast

Select from:

☑ About the same

(9.2.3.5) Primary reason for forecast

Select from:

☑ Increase/decrease in business activity

(9.2.3.6) Please explain

Compared to 2023, the volume of water discharge remains at the same level.

Total consumption – upstream

(9.2.3.1) Volume (megaliters/year)

40961.25

(9.2.3.2) Comparison with previous reporting year

Select from:

☑ Higher

(9.2.3.3) Primary reason for comparison with previous reporting year

Select from:

☑ Increase/decrease in business activity

(9.2.3.4) Five-year forecast

Select from:

☑ Lower

(9.2.3.5) Primary reason for forecast

Select from:

☑ Investment in water-smart technology/process

(9.2.3.6) Please explain

An increase in the volume of waterwithdrawals was recorded at one of the upstream assets in connection with the increase in the operating fund of injection wells and the launch of additional units, which are aimed at increasing and restoring production at the fields. In 5-years forecast the Company plan to develop and approve the Water Management Plan and according to the decelopment scenario decrease the water withdrawals.

Total withdrawals – midstream

(9.2.3.1) Volume (megaliters/year)

29257.22

(9.2.3.2) Comparison with previous reporting year

Select from:

☑ About the same

(9.2.3.3) Primary reason for comparison with previous reporting year

Select from:

☑ Investment in water-smart technology/process

(9.2.3.4) Five-year forecast

Select from:

☑ About the same

(9.2.3.5) Primary reason for forecast

Select from:

☑ Investment in water-smart technology/process

(9.2.3.6) Please explain

About the same level. The implementation of the first stage of the project "Reconstruction and expansion of the Astrakhan – Mangyshlak main water pipeline" has been completed in the KMG Group of companies. The project is aimed at increasing the capacity of the Astrakhan main water pipeline – Mangyshlak" and the renovation of worn-out equipment to provide water to the population, agricultural producers, industrial and oil and gas producing enterprises of Atyrau and Mangystau regions. The Astrakhan – Mangyshlak main water pipeline is the only centralized source of water supply for consumers Kurmangazinsky, Isataysky and Zhylyoysky districts of Atyrau region, as well as for the city of Zhanaozen, Beineu, Mangistau, Karakiyan and Tupkaragan districts of Mangistau region. Water consumption by the population is growing by 4-5% annually.

Total discharges – midstream

(9.2.3.1) Volume (megaliters/year)

2510.57

(9.2.3.2) Comparison with previous reporting year

Select from:

☑ Higher

(9.2.3.3) Primary reason for comparison with previous reporting year

Select from:

☑ Facility expansion

(9.2.3.4) Five-year forecast

Select from:

☑ About the same

(9.2.3.5) Primary reason for forecast

Select from:

☑ Investment in water-smart technology/process

(9.2.3.6) Please explain

An increase in the volume of wastewater in the terminal is observed.

Total consumption – midstream

(9.2.3.1) Volume (megaliters/year)

29257.22

(9.2.3.2) Comparison with previous reporting year

Select from:

☑ About the same

(9.2.3.3) Primary reason for comparison with previous reporting year

Select from:

☑ Other, please specify :About the same

(9.2.3.4) Five-year forecast

Select from:

☑ About the same

(9.2.3.5) Primary reason for forecast

Select from:

☑ Investment in water-smart technology/process

(9.2.3.6) Please explain

About the same level. The implementation of the first stage of the project "Reconstruction and expansion of the Astrakhan – Mangyshlak main water pipeline" has been completed in the KMG Group of companies. The project is aimed at increasing the capacity of the Astrakhan main water pipeline – Mangyshlak" and the renovation of worn-out equipment to provide water to the population, agricultural producers, industrial and oil and gas producing enterprises of Atyrau and Mangystau regions. The Astrakhan – Mangyshlak main water pipeline is the only centralized source of water supply for consumers Kurmangazinsky, Isataysky and Zhylyoysky districts of Atyrau region, as well as for the city of Zhanaozen, Beineu, Mangistau, Karakiyan and Tupkaragan districts of Mangistau region. Water consumption by the population is growing by 4-5% annually.

Total withdrawals – downstream

(9.2.3.1) Volume (megaliters/year)

26758.45

(9.2.3.2) Comparison with previous reporting year

Select from:

☑ Lower

(9.2.3.3) Primary reason for comparison with previous reporting year

Select from:

☑ Investment in water-smart technology/process

(9.2.3.4) Five-year forecast

Select from:

☑ Much lower

(9.2.3.5) Primary reason for forecast

Select from:

☑ Investment in water-smart technology/process

(9.2.3.6) Please explain

About the same level. In order to reduce the volume of freshwater abstraction and within the framework of the KMG Group's processing activities, the following measures are being implemented and are planned to be implemented: - modernization, reconstruction existing installations for mechanical, chemical and biological treatment of domestic wastewater, replacement of old cleaning equipment with more modern modular installations; - design of works on the reconstruction of evaporation fields; - retrofitting of treatment plants with additional technologies (reverse osmosis), which will subsequently allow use this water to produce steam for technological needs; - replacing old drinking water pipelines with new ones to reduce leaks and technological losses of fresh drinking water; - reconstruction of mechanical treatment facilities (MOS) within the framework of the project TAZALYQ, which will increase the productivity of the MOS by 2 times with the achievement of the standards of maximum permissible discharges for the content of petroleum products and suspended solids in the effluents sent further to the block biological purification; - reconstruction of the channel of normatively treated wastewater and reclamation of fields ANPZ evaporation; - construction of a wastewater treatment plant using reverse osmosis within the framework of the TAZALYQ project; - complete reconstruction and modernization of the sewage treatment plant system Subsequently, the efficiency of industrial wastewater treatment for petroleum products and suspended solids was improved from 76 to 98%, which reduced the environmental burden due to reducing emissions to the environment

Total discharges – downstream

(9.2.3.1) Volume (megaliters/year)

21212.4

(9.2.3.2) Comparison with previous reporting year

Select from:

☑ Higher

(9.2.3.3) Primary reason for comparison with previous reporting year

Select from:

☑ Increase/decrease in business activity

(9.2.3.4) Five-year forecast

Select from:

☑ Lower

(9.2.3.5) Primary reason for forecast

Select from:

☑ Investment in water-smart technology/process

(9.2.3.6) Please explain

The Pertomidia Refinery demonstrates adaptive and well-structures water management, focusing on the efficient use of water resources to support both daily operations and the company's sustainable development goals. The total water discharge was slowly increased.

Total consumption – downstream

(9.2.3.1) Volume (megaliters/year)

26758.45

(9.2.3.2) Comparison with previous reporting year

Select from:

☑ Lower

(9.2.3.3) Primary reason for comparison with previous reporting year

Select from:

☑ Investment in water-smart technology/process

(9.2.3.4) Five-year forecast

Select from:

☑ Much lower

(9.2.3.5) Primary reason for forecast

Select from:

☑ Investment in water-smart technology/process

(9.2.3.6) Please explain

The KMG Group Water Managemant Program is under development where the several different technologies and approaches is under consideration in order to reduce the water consumption.

Total withdrawals – chemicals

(9.2.3.1) Volume (megaliters/year)

1447

(9.2.3.2) Comparison with previous reporting year

Select from:

☑ Higher

(9.2.3.3) Primary reason for comparison with previous reporting year

Select from:

☑ Increase/decrease in efficiency

(9.2.3.4) Five-year forecast

Select from:

☑ About the same

(9.2.3.5) Primary reason for forecast

Select from:

☑ Increase/decrease in efficiency

(9.2.3.6) Please explain

The volume of water withdrawals was increased in KPI due to the company was increased the efficiency.
[Fixed row]

(9.2.4) Indicate whether water is withdrawn from areas with water stress, provide the volume, how it compares with the previous reporting year, and how it is forecasted to change.

(9.2.4.1) Withdrawals are from areas with water stress

Select from:

☑ Yes

(9.2.4.2) Volume withdrawn from areas with water stress (megaliters)

27317

(9.2.4.3) Comparison with previous reporting year

Select from:

☑ About the same

(9.2.4.4) Primary reason for comparison with previous reporting year

Select from:

☑ Investment in water-smart technology/process

(9.2.4.5) Five-year forecast

Select from:

☑ Lower

(9.2.4.6) Primary reason for forecast

Select from:

☑ Investment in water-smart technology/process

(9.2.4.7) % of total withdrawals that are withdrawn from areas with water stress

11.46

(9.2.4.8) Identification tool

Select all that apply

☑ WRI Aqueduct

☑ WWF Water Risk Filter

(9.2.4.9) Please explain

According to the World Resources Institute (WRI)6, Kazakhstan is located in a region of critical water scarcity, and a high level of water stress is projected over the next 15–20 years. KMG conducts a water use assessment in six of its subsidiaries located in regions facing elevated water scarcity, based on the WRI Aqueduct water stress indicator, including the Caspian Sea basin and the Syrdarya and Ural river basins. In 2024, the total water withdrawal in these regions amounted to 27.3 million m³. We also started to study the WWF Water Risk Filter in more detail in order to use in our operations.
[Fixed row]

(9.2.7) Provide total water withdrawal data by source.

Fresh surface water, including rainwater, water from wetlands, rivers, and lakes

(9.2.7.1) Relevance

Select from:

☑ Relevant

(9.2.7.2) Volume (megaliters/year)

40880.53

(9.2.7.3) Comparison with previous reporting year

Select from:

☑ About the same

(9.2.7.4) Primary reason for comparison with previous reporting year

Select from:

☑ Increase/decrease in business activity

(9.2.7.5) Please explain

There is a stable level of water intake from surface fresh sources with a slight increase in the level of fresh surface water intake by 3%. Continues of upgrading and construction of desalination plants, which make it possible to release the volumes of freshwater used for process purposes at our enterprises.

Brackish surface water/Seawater

(9.2.7.1) Relevance

Select from:

☑ Relevant

(9.2.7.2) Volume (megaliters/year)

14510.89

(9.2.7.3) Comparison with previous reporting year

Select from:

☑ About the same

(9.2.7.4) Primary reason for comparison with previous reporting year

Select from:

☑ Increase/decrease in business activity

(9.2.7.5) Please explain

There is a increase in the level of seawater intake by 5%. The main reason for the increase in seawater intake is that the use of underground water intake wells of Albsenomanian water for production needs in Ozenmunaigas.

Groundwater – renewable

(9.2.7.1) Relevance

Select from:

☑ Relevant

(9.2.7.2) Volume (megaliters/year)

4993.99

(9.2.7.3) Comparison with previous reporting year

Select from:

☑ About the same

(9.2.7.4) Primary reason for comparison with previous reporting year

Select from:

☑ Increase/decrease in business activity

(9.2.7.5) Please explain

The level of water intake from underground renewable sources was increased by 7%.

Groundwater – non-renewable

(9.2.7.1) Relevance

Select from:

☑ Relevant

(9.2.7.2) Volume (megaliters/year)

22732.97

(9.2.7.3) Comparison with previous reporting year

Select from:

☑ Higher

(9.2.7.4) Primary reason for comparison with previous reporting year

Select from:

☑ Increase/decrease in business activity

(9.2.7.5) Please explain

There are increase in business activities in upstream assets like MMG and OMG.

Produced/Entrained water

(9.2.7.1) Relevance

Select from:

☑ Relevant

(9.2.7.2) Volume (megaliters/year)

140795.82

(9.2.7.3) Comparison with previous reporting year

Select from:

☑ Higher

(9.2.7.4) Primary reason for comparison with previous reporting year

Select from:

☑ Increase/decrease in efficiency

(9.2.7.5) Please explain

The increase in the volumes of produced formation water is due to the rising water cut at mature and aging fields, which is a natural consequence of reservoir depletion and declining reservoir pressure.

Third party sources

(9.2.7.1) Relevance

Select from:

☑ Relevant

(9.2.7.2) Volume (megaliters/year)

14473.57

(9.2.7.3) Comparison with previous reporting year

Select from:

☑ Lower

(9.2.7.4) Primary reason for comparison with previous reporting year

Select from:

☑ Investment in water-smart technology/process

(9.2.7.5) Please explain

Due to the construction and commissioning of a desalination plant at the Karazhanbasmunai field, there has been a significant reduction in fresh water consumption. [Fixed row]

(9.2.8) Provide total water discharge data by destination.

Fresh surface water

(9.2.8.1) Relevance

Select from:

☑ Not relevant

Brackish surface water/seawater

(9.2.8.1) Relevance

Select from:

☑ Relevant

(9.2.8.2) Volume (megaliters/year)

13652.54

(9.2.8.3) Comparison with previous reporting year

Select from:

☑ Higher

(9.2.8.4) Primary reason for comparison with previous reporting year

Select from:

☑ Increase/decrease in business activity

(9.2.8.5) Please explain

There is a slight decrease in the volume of discharges into sea waters

Groundwater

(9.2.8.1) Relevance

Select from:

☑ Not relevant

Third-party destinations

(9.2.8.1) Relevance

Select from:

☑ Relevant

(9.2.8.2) Volume (megaliters/year)

1554.97

(9.2.8.3) Comparison with previous reporting year

Select from:

☑ Higher

(9.2.8.4) Primary reason for comparison with previous reporting year

Select from:

☑ Facility expansion

(9.2.8.5) Please explain

There is aincrease in the volume of water transferred to third parties.
[Fixed row]

(9.2.9) Within your direct operations, indicate the highest level(s) to which you treat your discharge.

Tertiary treatment

(9.2.9.1) Relevance of treatment level to discharge

Select from:

☑ Not relevant

(9.2.9.6) Please explain

Not applicable

Secondary treatment

(9.2.9.1) Relevance of treatment level to discharge

Select from:

☑ Relevant

(9.2.9.2) Volume (megaliters/year)

10512.41

(9.2.9.3) Comparison of treated volume with previous reporting year

Select from:

☑ About the same

(9.2.9.4) Primary reason for comparison with previous reporting year

Select from:

☑ Other, please specify :About the same

(9.2.9.5) % of your sites/facilities/operations this volume applies to

Select from:

☑ 100%

(9.2.9.6) Please explain

Wastewater treatment plants treat the following high-priority pollutants: suspended solids, COD, BOD, petroleum products, chlorides, sulphates, iron, nitrites, nitrates, ammonia nitrogen, synthetic surfactants, etc. Pollutant discharge standards are calculated according to the Methodology for Determining Environmental Emission Standards approved by Order No. 63 of the Minister of Ecology and Natural Resources of the Republic of Kazakhstan dated 10 March 2021. After wastewater

treatment in wastewater treatment plants, the effluent treated to standard quality is discharged to specialized receivers: storage ponds, evaporation fields and filtration fields. There is no discharge to surface water bodies or terrain.

Primary treatment only

(9.2.9.1) Relevance of treatment level to discharge

Select from:

☑ Not relevant

(9.2.9.6) Please explain

Not applicable

Discharge to the natural environment without treatment

(9.2.9.1) Relevance of treatment level to discharge

Select from:

☑ Not relevant

(9.2.9.6) Please explain

Not applicable

Discharge to a third party without treatment

(9.2.9.1) Relevance of treatment level to discharge

Select from:

☑ Relevant

(9.2.9.2) Volume (megaliters/year)

1554.97

(9.2.9.3) Comparison of treated volume with previous reporting year

Select from:

☑ Higher

(9.2.9.4) Primary reason for comparison with previous reporting year

Select from:

☑ Increase/decrease in business activity

(9.2.9.5) % of your sites/facilities/operations this volume applies to

Select from:

☑ 100%

(9.2.9.6) Please explain

There is aincrease in the volume of water transferred to third parties.

Other

(9.2.9.1) Relevance of treatment level to discharge

Select from:

☑ Not relevant

(9.2.9.6) Please explain

Not applicable
[Fixed row]

(9.2.10) Provide details of your organization’s emissions of nitrates, phosphates, pesticides, and other priority substances to water in the reporting year.

(9.2.10.1) Emissions to water in the reporting year (metric tons)

167.3

(9.2.10.2) Categories of substances included

Select all that apply

☑ Nitrates

☑ Phosphates

(9.2.10.4) Please explain

In the KMG Group of companies, in wastewater nitrates and phosphates account for 3% of the total amount of pollutants discharged to evaporation fields and storage facilities. There are regularly analyzed in accordance with established standards. Production control over compliance with the norms of maximum permissible discharges is carried out by an accredited laboratory. The company does not use pesticides in its activities. There are no pesticides.
[Fixed row]

(9.3) In your direct operations and upstream value chain, what is the number of facilities where you have identified substantive water-related dependencies, impacts, risks, and opportunities?

Direct operations

(9.3.1) Identification of facilities in the value chain stage

Select from:

☑ Yes, we have assessed this value chain stage and identified facilities with water-related dependencies, impacts, risks, and opportunities

(9.3.2) Total number of facilities identified

3

(9.3.3) % of facilities in direct operations that this represents

Select from:

☑ 1-25

(9.3.4) Please explain

KMG carries out production activities in the entire territory of the Republic of Kazakhstan, as well as in Romania and Georgia.

Upstream value chain

(9.3.1) Identification of facilities in the value chain stage

Select from:

☑ Yes, we have assessed this value chain stage and identified facilities with water-related dependencies, impacts, risks, and opportunities

(9.3.2) Total number of facilities identified

3

(9.3.4) Please explain

Facilities subject to water risks that could potentially have a significant financial or strategic impact on our business are located in western Kazakhstan, where there is a risk of water supply deficit.
[Fixed row]

(9.3.1) For each facility referenced in 9.3, provide coordinates, water accounting data, and a comparison with the previous reporting year.

Row 1

(9.3.1.1) Facility reference number

Select from:

☑ Facility 1

(9.3.1.2) Facility name (optional)

Atyrau Oil Refinery LLP

(9.3.1.3) Value chain stage

Select from:

☑ Direct operations

(9.3.1.4) Dependencies, impacts, risks, and/or opportunities identified at this facility

Select all that apply

☑ Dependencies

☑ Impacts

☑ Risks

☑ Opportunities

(9.3.1.5) Withdrawals or discharges in the reporting year

Select from:

☑ Yes, withdrawals and discharges

(9.3.1.7) Country/Area & River basin

Kazakhstan

☑ Ural

(9.3.1.8) Latitude

47.077986

(9.3.1.9) Longitude

51.921627

(9.3.1.10) Located in area with water stress

Select from:

☑ No

(9.3.1.12) Oil & gas sector business division

Select all that apply

☑ Downstream

(9.3.1.13) Total water withdrawals at this facility (megaliters)

7420.45

(9.3.1.14) Comparison of total withdrawals with previous reporting year

Select from:

☑ About the same

(9.3.1.15) Withdrawals from fresh surface water, including rainwater, water from wetlands, rivers and lakes

7272.9

(9.3.1.16) Withdrawals from brackish surface water/seawater

0

(9.3.1.17) Withdrawals from groundwater - renewable

0

(9.3.1.18) Withdrawals from groundwater - non-renewable

0

(9.3.1.19) Withdrawals from produced/entrained water

0

(9.3.1.20) Withdrawals from third party sources

147.55

(9.3.1.21) Total water discharges at this facility (megaliters)

5879.22

(9.3.1.22) Comparison of total discharges with previous reporting year

Select from:

☑ About the same

(9.3.1.23) Discharges to fresh surface water

0

(9.3.1.24) Discharges to brackish surface water/seawater

0

(9.3.1.25) Discharges to groundwater

0

(9.3.1.26) Discharges to third party destinations

0

(9.3.1.27) Total water consumption at this facility (megaliters)

7420.45

(9.3.1.28) Comparison of total consumption with previous reporting year

Select from:

☑ About the same

(9.3.1.29) Please explain

Water intake and wastewater discharge are at the level of last year. Fresh river water is used to supply circulating water supply systems, industrial needs and fire protection needs of the plant. For economical and rational use of water resources, a recycling water supply system is used at the plant's facilities. Industrial wastewater generated during oil refining is mechanically treated, after which it enters biological wastewater

Row 2

(9.3.1.1) Facility reference number

Select from:

☑ Facility 2

(9.3.1.2) Facility name (optional)

Mangistaumunaigas JSC

(9.3.1.3) Value chain stage

Select from:

☑ Direct operations

(9.3.1.4) Dependencies, impacts, risks, and/or opportunities identified at this facility

Select all that apply

☑ Dependencies

☑ Impacts

☑ Risks

☑ Opportunities

(9.3.1.5) Withdrawals or discharges in the reporting year

Select from:

☑ Yes, withdrawals and discharges

(9.3.1.7) Country/Area & River basin

Afghanistan
☑ Other, please specify :Caspian Sea (east coast)

(9.3.1.8) Latitude

43.639865

(9.3.1.9) Longitude

51.165596

(9.3.1.10) Located in area with water stress

Select from:
☑ Yes

(9.3.1.12) Oil & gas sector business division

Select all that apply
☑ Upstream

(9.3.1.13) Total water withdrawals at this facility (megaliters)

16618.06

(9.3.1.14) Comparison of total withdrawals with previous reporting year

Select from:
☑ About the same

(9.3.1.15) Withdrawals from fresh surface water, including rainwater, water from wetlands, rivers and lakes

0

(9.3.1.16) Withdrawals from brackish surface water/seawater

0

(9.3.1.17) Withdrawals from groundwater - renewable

0

(9.3.1.18) Withdrawals from groundwater - non-renewable

15499.42

(9.3.1.19) Withdrawals from produced/entrained water

50495.92

(9.3.1.20) Withdrawals from third party sources

1118.64

(9.3.1.21) Total water discharges at this facility (megaliters)

26.95

(9.3.1.22) Comparison of total discharges with previous reporting year

Select from:

☑ Lower

(9.3.1.23) Discharges to fresh surface water

0

(9.3.1.24) Discharges to brackish surface water/seawater

0

(9.3.1.25) Discharges to groundwater

0

(9.3.1.26) Discharges to third party destinations

0

(9.3.1.27) Total water consumption at this facility (megaliters)

16618.06

(9.3.1.28) Comparison of total consumption with previous reporting year

Select from:

☑ About the same

(9.3.1.29) Please explain

There is a slight decrease in the level of consumption and intake of water and wastewater disposal. Effluents from industrial buildings and technological structures, formed as a result of production activities, as well as produced water, flushing, melt and rain surface runoff from the territory of the industrial site are discharged into the industrial sewerage network. Discharge and accumulation of industrial wastewater is carried out in special buffer tanks or inventory pallets, followed by removal of wastewater to the formation water treatment plant. All production sewage water is reused in the reservoir pressure maintenance system. According to the results of 2024, the total volume of associated formation water extracted was 50495.92 megaliters, of which 50495.92 megalitres was injected into formation to maintain the associated formation pressure. Household waste water generated in the process of household activities, are cleaned at complete biological treatment facilities. The complex of treatment facilities is located at a distance of about 10.0 km from the water edge of the Caspian Sea and was transferred for a long-term lease to a contracting company

Row 3

(9.3.1.1) Facility reference number

Select from:

☑ Facility 3

(9.3.1.2) Facility name (optional)

Ozenmunaigas JSC

(9.3.1.3) Value chain stage

Select from:

☑ Direct operations

(9.3.1.4) Dependencies, impacts, risks, and/or opportunities identified at this facility

Select all that apply

☑ Dependencies

☑ Impacts

☑ Risks

☑ Opportunities

(9.3.1.5) Withdrawals or discharges in the reporting year

Select from:

☑ Yes, withdrawals and discharges

(9.3.1.7) Country/Area & River basin

Afghanistan

☑ Other, please specify :Caspian Sea (east coast)

(9.3.1.8) Latitude

43.340371

(9.3.1.9) Longitude

52.857114

(9.3.1.10) Located in area with water stress

Select from:

☑ Yes

(9.3.1.12) Oil & gas sector business division

Select all that apply

☑ Upstream

(9.3.1.13) Total water withdrawals at this facility (megaliters)

18106.15

(9.3.1.14) Comparison of total withdrawals with previous reporting year

Select from:

☑ Higher

(9.3.1.15) Withdrawals from fresh surface water, including rainwater, water from wetlands, rivers and lakes

0

(9.3.1.16) Withdrawals from brackish surface water/seawater

12861.03

(9.3.1.17) Withdrawals from groundwater - renewable

0

(9.3.1.18) Withdrawals from groundwater - non-renewable

4993

(9.3.1.19) Withdrawals from produced/entrained water

46964

(9.3.1.20) Withdrawals from third party sources

252.12

(9.3.1.21) Total water discharges at this facility (megaliters)

17.29

(9.3.1.22) Comparison of total discharges with previous reporting year

Select from:

☑ About the same

(9.3.1.23) Discharges to fresh surface water

0

(9.3.1.24) Discharges to brackish surface water/seawater

0

(9.3.1.25) Discharges to groundwater

0

(9.3.1.26) Discharges to third party destinations

0

(9.3.1.27) Total water consumption at this facility (megaliters)

18106.15

(9.3.1.28) Comparison of total consumption with previous reporting year

Select from:

☑ Higher

(9.3.1.29) Please explain

The entire volume of household sewage water is transferred to third-party organizations. At the same time, the volume of associated formation water extracted for 2024 is 46964 megalitres, 100% of which is injected into formation to maintain the associated formation pressure.

Row 4

(9.3.1.1) Facility reference number

Select from:

☑ Facility 1

(9.3.1.2) Facility name (optional)

Kazmortransflot LLP

(9.3.1.3) Value chain stage

Select from:

☑ Direct operations

(9.3.1.4) Dependencies, impacts, risks, and/or opportunities identified at this facility

Select all that apply

☑ Dependencies

☑ Impacts

☑ Risks

☑ Opportunities

(9.3.1.5) Withdrawals or discharges in the reporting year

Select from:

☑ Yes, withdrawals and discharges

(9.3.1.7) Country/Area & River basin

Afghanistan
☑ Other, please specify :Caspian Sea (east coast)

(9.3.1.8) Latitude

43.66039

(9.3.1.9) Longitude

51.14259

(9.3.1.10) Located in area with water stress

Select from:
☑ Yes

(9.3.1.12) Oil & gas sector business division

Select all that apply
☑ Midstream

(9.3.1.13) Total water withdrawals at this facility (megaliters)

1062.73

(9.3.1.14) Comparison of total withdrawals with previous reporting year

Select from:
☑ About the same

(9.3.1.15) Withdrawals from fresh surface water, including rainwater, water from wetlands, rivers and lakes

1058.87

(9.3.1.16) Withdrawals from brackish surface water/seawater

0

(9.3.1.17) Withdrawals from groundwater - renewable

0

(9.3.1.18) Withdrawals from groundwater - non-renewable

0

(9.3.1.19) Withdrawals from produced/entrained water

0

(9.3.1.20) Withdrawals from third party sources

5.29

(9.3.1.21) Total water discharges at this facility (megaliters)

4.12

(9.3.1.22) Comparison of total discharges with previous reporting year

Select from:

☑ Much lower

(9.3.1.23) Discharges to fresh surface water

0

(9.3.1.24) Discharges to brackish surface water/seawater

0

(9.3.1.25) Discharges to groundwater

0

(9.3.1.26) Discharges to third party destinations

0

(9.3.1.27) Total water consumption at this facility (megaliters)

1062.73

(9.3.1.28) Comparison of total consumption with previous reporting year

Select from:

☑ About the same

(9.3.1.29) Please explain

The entire volume of household sewage water is transferred to third-party organizations. The reduction in discharge is due to the following factors: • In August 2024, the KMTF Management decided to ban the discharge of wastewater from KMTF vessels into the sea. Previously, discharge was carried out outside the state border of the Republic of Kazakhstan in accordance with Rule 11 of Annex IV to the International Convention MARPOL. • Reduction of the KMTF fleet: tugs "Talas", "Irgiz" and "Emba" were transferred to a bareboat charter to OFCO.
[Add row]

(9.3.2) For the facilities in your direct operations referenced in 9.3.1, what proportion of water accounting data has been third party verified?

Water withdrawals – total volumes

(9.3.2.1) % verified

Select from:

☑ 76-100

(9.3.2.2) Verification standard used

ESG non-financial reporting standards. GRI standards. KMG developed the Sustainability Report for 2024 using the standard of non-financial reporting GRI standard which was verified by third party. The information regarding water management was verified within the verifition of Sustanability report.

Water withdrawals – volume by source

(9.3.2.1) % verified

Select from:

☑ 76-100

(9.3.2.2) Verification standard used

ESG non-financial reporting standards. GRI standards. KMG developed the Sustainability Report for 2024 using the standard of non-financial reporting GRI standard which was verified by third party. The information regarding water management was verified within the verifition of Sustanability report.

Water withdrawals – quality by standard water quality parameters

(9.3.2.1) % verified

Select from:

☑ 76-100

(9.3.2.2) Verification standard used

ESG non-financial reporting standards. GRI standards. KMG developed the Sustainability Report for 2024 using the standard of non-financial reporting GRI standard which was verified by third party. The information regarding water management was verified within the verifition of Sustanability report.

Water discharges – total volumes

(9.3.2.1) % verified

Select from:

☑ 76-100

(9.3.2.2) Verification standard used

ESG non-financial reporting standards. GRI standards. KMG developed the Sustainability Report for 2024 using the standard of non-financial reporting GRI standard which was verified by third party. The information regarding water management was verified within the verifition of Sustanability report.

Water discharges – volume by destination

(9.3.2.1) % verified

Select from:

☑ 76-100

(9.3.2.2) Verification standard used

ESG non-financial reporting standards. GRI standards. KMG developed the Sustainability Report for 2024 using the standard of non-financial reporting GRI standard which was verified by third party. The information regarding water management was verified within the verifition of Sustanability report.

Water discharges – volume by final treatment level

(9.3.2.1) % verified

Select from:

☑ 76-100

(9.3.2.2) Verification standard used

ESG non-financial reporting standards. GRI standards. KMG developed the Sustainability Report for 2024 using the standard of non-financial reporting GRI standard which was verified by third party. The information regarding water management was verified within the verifition of Sustanability report.

Water discharges – quality by standard water quality parameters

(9.3.2.1) % verified

Select from:

☑ 76-100

(9.3.2.2) Verification standard used

ESG non-financial reporting standards. GRI standards. KMG developed the Sustainability Report for 2024 using the standard of non-financial reporting GRI standard which was verified by third party. The information regarding water management was verified within the verifition of Sustanability report.

Water consumption – total volume

(9.3.2.1) % verified

Select from:

☑ 76-100

(9.3.2.2) Verification standard used

ESG non-financial reporting standards. GRI standards. KMG developed the Sustainability Report for 2024 using the standard of non-financial reporting GRI standard which was verified by third party. The information regarding water management was verified within the verifition of Sustanability report.
[Fixed row]

(9.4) Could any of your facilities reported in 9.3.1 have an impact on a requesting CDP supply chain member?

Select from:

☑ We do not have this data but we intend to collect it within two years

(9.5) Provide a figure for your organization’s total water withdrawal efficiency.

	Revenue (currency)	Total water withdrawal efficiency	Anticipated forward trend
	12670168	*53.15*	*The total withdrawal volume also includes produced water in amount 140 795.92 m3. The overall efficiency of water intake is at the level of last year.*

[Fixed row]

(9.11) Do you calculate water intensity for your activities associated with the oil & gas sector?

Select from:

☑ Yes

(9.11.1) Provide water intensity information associated with your activities in the oil & gas sector.

Row 1

(9.11.1.1) Business division

Select all that apply

☑ Upstream

(9.11.1.2) Water intensity value (m3/denominator)

252.52

(9.11.1.3) Numerator: water aspect

Select from:

☑ Freshwater consumption

(9.11.1.4) Denominator

Select from:

☑ Other, please specify :tons of hydrocarbon produced

(9.11.1.5) Comparison with previous reporting year

Select from:

☑ Lower

(9.11.1.6) Please explain

There is a decrease in the specific consumption of fresh water in 2024 compared to 2023 by 12% due to the desalination plant costruction in Karazhanbasmunay. The fresh water per unit of production (cubic metres per thousand tonnes) intetnisty for 2024 is 252.52 (306.24 in 2023, 530.71 in 2020). The calculation made by IOGP standards.
[Add row]

(9.12) Provide any available water intensity values for your organization’s products or services.

Row 1

(9.12.1) Product name

Freshwater consumption to oil and gas production

(9.12.2) Water intensity value

252.52

(9.12.3) Numerator: Water aspect

Select from:

☑ Water withdrawn

(9.12.4) Denominator

There is a decrease in the specific consumption of fresh water in 2024 compared to 2023 by 12%

(9.12.5) Comment

There is a decrease in the specific consumption of fresh water in 2024 compared to 2023 by 12% due to the desalination plant costruction in Karazhanbasmunay. The fresh water per unit of production (cubic metres per thousand tonnes) intetnisty for 2024 is 252.52 (306.24 in 2023, 530.71 in 2020). The calculation made by IOGP standards.
[Add row]

(9.13) Do any of your products contain substances classified as hazardous by a regulatory authority?

	Products contain hazardous substances	Comment
	Select from: ☑ No	*Do not contain*

[Fixed row]

(9.14) Do you classify any of your current products and/or services as low water impact?

	Products and/or services classified as low water impact	Primary reason for not classifying any of your current products and/or services as low water impact	Please explain
	Select from: ☑ No, and we do not plan to address this within the next two years	*Select from:* ☑ Important but not an immediate business priority	*The company have developed a water management program for 10 years, that will address the impact of our products on water.*

[Fixed row]

(9.15) Do you have any water-related targets?

Select from:

☑ No, but we plan to within the next two years

(9.15.3) Why do you not have water-related target(s) and what are your plans to develop these in the future?

(9.15.3.1) Primary reason

Select from:

☑ We are planning to introduce a target within the next two years

(9.15.3.2) Please explain

The KMG Group long term water management program with targets was delepoved and currently under approval proccess. KMG acknowledges the critical importance of responsible water resource management, our approach to water management includes water consumption, improving water recyclingprocesses, and ensuring wastewater treatment before discharge. Wa aim to mitigate our environmental impact and contribute to clean water and sanitation both in our operations and within the comminuty.
[Fixed row]

C11. Environmental performance - Biodiversity

(11.2) What actions has your organization taken in the reporting year to progress your biodiversity-related commitments?

(11.2.1) Actions taken in the reporting period to progress your biodiversity-related commitments

Select from:

☑ Yes, we are taking actions to progress our biodiversity-related commitments

(11.2.2) Type of action taken to progress biodiversity- related commitments

Select all that apply

☑ Land/water protection

☑ Land/water management

☑ Species management

☑ Education & awareness

☑ Law & policy

[Fixed row]

(11.3) Does your organization use biodiversity indicators to monitor performance across its activities?

	Does your organization use indicators to monitor biodiversity performance?
	Select from:

	Does your organization use indicators to monitor biodiversity performance?
	☑ No, we do not use indicators, but plan to within the next two years

[Fixed row]

(11.4) Does your organization have activities located in or near to areas important for biodiversity in the reporting year?

Legally protected areas

(11.4.1) Indicate whether any of your organization's activities are located in or near to this type of area important for biodiversity

Select from:

☑ Yes (partial assessment)

(11.4.2) Comment

SDEs of KMG constantly monitor the flora and fauna, conducting hydrogeological monitoring, seasonal baseline environmental studies, regular environmental monitoring.

UNESCO World Heritage sites

(11.4.1) Indicate whether any of your organization's activities are located in or near to this type of area important for biodiversity

Select from:

☑ No

(11.4.2) Comment

Within its environmental policy, the company undertakes: - not to carry out activities in specially protected natural areas that are of particular value as a habitat for rare, endangered and high value species of animals; to conduct risk assessment when operating in environmentally sensitive areas.

UNESCO Man and the Biosphere Reserves

(11.4.1) Indicate whether any of your organization's activities are located in or near to this type of area important for biodiversity

Select from:

☑ No

(11.4.2) Comment

Within its environmental policy, the company undertakes: - not to carry out activities in specially protected natural areas that are of particular value as a habitat for rare, endangered and high value species of animals; to conduct risk assessment when operating in environmentally sensitive areas.

Ramsar sites

(11.4.1) Indicate whether any of your organization's activities are located in or near to this type of area important for biodiversity

Select from:

☑ No

(11.4.2) Comment

Within its environmental policy, the company undertakes: - not to carry out activities in specially protected natural areas that are of particular value as a habitat for rare, endangered and high value species of animals; to conduct risk assessment when operating in environmentally sensitive areas.

Key Biodiversity Areas

(11.4.1) Indicate whether any of your organization's activities are located in or near to this type of area important for biodiversity

Select from:

☑ No

(11.4.2) Comment

Within its environmental policy, the company undertakes: - not to carry out activities in specially protected natural areas that are of particular value as a habitat for rare, endangered and high value species of animals; to conduct risk assessment when operating in environmentally sensitive areas.

Other areas important for biodiversity

(11.4.1) Indicate whether any of your organization's activities are located in or near to this type of area important for biodiversity

Select from:

☑ No

(11.4.2) Comment

Within its environmental policy, the company undertakes: - not to carry out activities in specially protected natural areas that are of particular value as a habitat for rare, endangered and high value species of animals; to conduct risk assessment when operating in environmentally sensitive areas.
[Fixed row]

(11.4.1) Provide details of your organization’s activities in the reporting year located in or near to areas important for biodiversity.

Row 1

(11.4.1.2) Types of area important for biodiversity

Select all that apply

☑ Legally protected areas

(11.4.1.3) Protected area category (IUCN classification)

Select from:

☑ Category IV-VI

(11.4.1.4) Country/area

Select from:

☑ Kazakhstan

(11.4.1.5) Name of the area important for biodiversity

Kokzhide-Kumzhargan Local State Nature Reserve

(11.4.1.6) Proximity

Select from:

☑ Up to 10 km

(11.4.1.8) Briefly describe your organization’s activities in the reporting year located in or near to the selected area

Comprehensive monitoring will be conducted, including monitoring of groundwater. A roadmap for the liquidation of wells near the Kokzhide sands is being developed. In September 2024, the KMG Corporate Center organized training for specialists from subsidiaries and affiliates on biodiversity impact management. The program was attended by ecologists and engineers from the corporate center and the KMG Group of Companies. The purpose of the training was to develop a deep understanding of biodiversity issues in the context of enterprise management. During the training, the participants studied the key aspects of the impact of production activities on the environment and biodiversity, methods for minimizing it, as well as the requirements for accounting and reporting. Particular attention was paid to: a) biodiversity impact assessment, analysis of indicators and bioindications taking into account international standards and best practices; b) recommendations of the Task Force on Nature-related Financial Disclosures (TNFD) and the Global Reporting Initiative (GRI); c) principles of the hierarchy of measures to reduce impacts on biodiversity, including four key actions: prevention, conservation, restoration and compensation of potential impacts. This approach contributes to the integration of biodiversity issues into the KMG management system, ensuring sustainable development and compliance with international environmental standards. In common, planting of 4.5 million saxaul seedlings on an area of 15 thousand hectares on the dried bed of the Aral Sea has been completed. The project for reconstruction of drainage channels and reclamation of evaporation fields of the Atyrau Oil Refinery is ongoing. Work is underway to restore contaminated lands and reduce discharges of pollutants.

(11.4.1.9) Indicate whether any of your organization’s activities located in or near to the selected area could negatively affect biodiversity

Select from:

☑ No

(11.4.1.11) Explain how your organization’s activities located in or near to the selected area could negatively affect biodiversity, how this was assessed, and describe any mitigation measures implemented

No negative effects was determined.

Row 2

(11.4.1.2) Types of area important for biodiversity

Select all that apply

☑ Legally protected areas

(11.4.1.3) Protected area category (IUCN classification)

Select from:

☑ Category IV-VI

(11.4.1.4) Country/area

Select from:

☑ Kazakhstan

(11.4.1.5) Name of the area important for biodiversity

Special environmentally sensitive zone of Kazakhstan Sector of the Caspian Sea

(11.4.1.6) Proximity

Select from:

☑ Up to 70 km

(11.4.1.8) Briefly describe your organization’s activities in the reporting year located in or near to the selected area

LLP “Magistralny Vodovod” carried out fish stocking of the Kigach River, releasing 23.6 thousand juvenile belugas in order to preserve the biodiversity of the Caspian Sea and its coastal zone. For the same purpose, in 2024, LLP “Kalamkas-Khazar Operating”, as part of compensatory measures, released 70 thousand juveniles of Russian sturgeon and sterlet into the Ural River, while LLP “KMG Systems & Services” released 18.8 thousand juveniles of sturgeon species.

(11.4.1.9) Indicate whether any of your organization’s activities located in or near to the selected area could negatively affect biodiversity

Select from:

☑ No

(11.4.1.11) Explain how your organization’s activities located in or near to the selected area could negatively affect biodiversity, how this was assessed, and describe any mitigation measures implemented

No negative effects was determined.
[Add row]

C13. Further information & sign off

(13.1) Indicate if any environmental information included in your CDP response (not already reported in 7.9.1/2/3, 8.9.1/2/3/4, and 9.3.2) is verified and/or assured by a third party?

	Other environmental information included in your CDP response is verified and/or assured by a third party
	Select from: ☑ Yes

[Fixed row]

(13.1.1) Which data points within your CDP response are verified and/or assured by a third party, and which standards were used?

Row 1

(13.1.1.1) Environmental issue for which data has been verified and/or assured

Select all that apply

☑ Climate change

(13.1.1.2) Disclosure module and data verified and/or assured

Environmental performance – Climate change

☑ Fuel consumption

☑ Methane emissions

☑ Base year emissions

☑ Emissions breakdown by country/area

☑ Emissions breakdown by business division

☑ Electricity/Steam/Heat/Cooling generation

☑ Renewable fuel consumption
☑ All data points in module 7
☑ Renewable Electricity/Steam/Heat/Cooling generation
☑ Year on year change in absolute emissions (Scope 3)
☑ Renewable Electricity/Steam/Heat/Cooling consumption
☑ Year on year change in absolute emissions (Scope 1 and 2)
☑ Year on year change in emissions intensity (Scope 1 and 2)
☑ Electricity/Steam/Heat/Cooling consumption
☑ Emissions reduction initiatives/activities

(13.1.1.3) Verification/assurance standard

General standards
☑ ISAE 3000

(13.1.1.4) Further details of the third-party verification/assurance process

The data disclosed in section 7 was verified as part of the verification of KMG's 2024 Sustainability Report. The conclusion of the verifier on pages 195-197 of the attached report.

(13.1.1.5) Attach verification/assurance evidence/report (optional)

KMG SR'24_EY Report EN.pdf

Row 2

(13.1.1.1) Environmental issue for which data has been verified and/or assured

Select all that apply
☑ Water
☑ Biodiversity

(13.1.1.2) Disclosure module and data verified and/or assured

Environmental performance – Water security

☑ All data points in module 9
☑ Water consumption– total volume
☑ Water discharges– total volumes
☑ Water withdrawals– total volumes
☑ Water withdrawals – volumes by source
☑ Facilities with water-related dependencies, impacts, risks and opportunities
☑ Emissions to water in the reporting year
☑ Water discharges – volumes by destination
☑ Water intensities of products and services
☑ Water discharges – volumes by treatment method
☑ Volume withdrawn from areas with water stress (megaliters)

(13.1.1.3) Verification/assurance standard

General standards

☑ ISAE 3000
☑ SGS Sustainability Report Assurance

(13.1.1.4) Further details of the third-party verification/assurance process

ESG non-financial reporting standards. GRI standards. KMG developed the Sustainability Report for 2024 using the standard of non-financial reporting GRI standard which was verified by trhird party. The information regarding water management was verified within the verifition of Sustanability repor by Ernst and Young. The Verification statement on p.195-197 of KMG 2024 Sustainability report (attached).

(13.1.1.5) Attach verification/assurance evidence/report (optional)

KMG_2024_Sustainability report.pdf

Row 3

(13.1.1.1) Environmental issue for which data has been verified and/or assured

Select all that apply

☑ Climate change

(13.1.1.2) Disclosure module and data verified and/or assured

Identification, assessment, and management of dependencies, impacts, risks, and opportunities

☑ Identification, assessment, and management processes

(13.1.1.3) Verification/assurance standard

General standards

☑ ISAE 3000

(13.1.1.4) Further details of the third-party verification/assurance process

The data disclosed in section 2 was verified as part of the verification of KMG's 2024 Sustainability Report. The conclusion of the verifier on pages 195-197 of the attached report.

(13.1.1.5) Attach verification/assurance evidence/report (optional)

KMG SR'24_EY Report EN.pdf

Row 4

(13.1.1.1) Environmental issue for which data has been verified and/or assured

Select all that apply

☑ Climate change

(13.1.1.2) Disclosure module and data verified and/or assured

Disclosure of risks and opportunities

☑ Other data point in module 3, please specify :risks management system

(13.1.1.3) Verification/assurance standard

General standards

☑ ISAE 3000

(13.1.1.4) Further details of the third-party verification/assurance process

The data disclosed in section 3 on risks management system was verified as part of the verification of KMG's 2024 Sustainability Report. The conclusion of the verifier on pages 195-197 of the attached report.

(13.1.1.5) Attach verification/assurance evidence/report (optional)

KMG SR'24_EY Report EN.pdf

Row 5

(13.1.1.1) Environmental issue for which data has been verified and/or assured

Select all that apply

☑ Climate change

(13.1.1.2) Disclosure module and data verified and/or assured

Introduction

☑ All data points in module 1

(13.1.1.3) Verification/assurance standard

General standards

☑ ISAE 3000

(13.1.1.4) Further details of the third-party verification/assurance process

The data disclosed in section 1 was verified as part of the verification of KMG's 2024 Annual Report. The conclusion of the verifier on pages 246-253 of the attached report. See https://www.kmg.kz/upload/iblock/087/belzl5c394mru27sjgv6qer6hkyltw2o/KazMunayGas_AR2024_ENG_1906.pdf

(13.1.1.5) Attach verification/assurance evidence/report (optional)

KazMunayGas_AR2024_ENG.pdf

Row 6

(13.1.1.1) Environmental issue for which data has been verified and/or assured

Select all that apply

☑ Climate change

(13.1.1.2) Disclosure module and data verified and/or assured

Business strategy

☑ Other data point in module 5, please specify :Governance, low-carbon scenario modelling, Strategy, GHG inventory

(13.1.1.3) Verification/assurance standard

General standards

☑ ISAE 3000

(13.1.1.4) Further details of the third-party verification/assurance process

The data disclosed in section 5 on governance, low-carbon scenario modelling, strategy, GHG emission inventory was verified as part of the verification of KMG's 2024 Sustainability Report. The conclusion of the verifier on pages 195-197 of the attached report.

(13.1.1.5) Attach verification/assurance evidence/report (optional)

KMG SR'24_EY Report EN.pdf
[Add row]

(13.2) Use this field to provide any additional information or context that you feel is relevant to your organization's response. Please note that this field is optional and is not scored.

	Additional information	Attachment (optional)
	The KMG 2024 Annual Report	*KazMunayGas_AR2024_ENG..pdf*

[Fixed row]

(13.3) Provide the following information for the person that has signed off (approved) your CDP response.

(13.3.1) Job title

Head of decarbonization and ecology department (division)

(13.3.2) Corresponding job category

Select from:

☑ Environment/Sustainability manager

[Fixed row]

(13.4) Please indicate your consent for CDP to share contact details with the Pacific Institute to support content for its Water Action Hub website.

Select from:

☑ Yes, CDP may share our Disclosure Submission Lead contact details with the Pacific Institute