

On the way to SUSTAINABILITY

JSC NC «KAZMUNAYGAS»
SUSTAINABILITY REPORT 2015



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ABOUT OUR REPORT

The 2015 JSC "National Company "KazMunayGas" (hereafter – KMG) Sustainability Report presents the performance data of the Group's non-financial impacts.

This is the first report following the Comprehensive option of GRI G4 international standards, proving and continuing our transparency commitments.

We aim to integrate the stakeholders' opinions into our daily business decisions and operations, and point out our measures to integrate all environmental, economic and social considerations during our everyday activities.

The performance indicators include data on the financial, social performance as well as information on indicators in the field of Health, Safety and Environment.

In order to identify the borders of our impacts, as well as the material aspects, we have conducted research and asked for the input of subsidiaries, affiliated companies and joint ventures.

Data on economic and performance includes all KMG subsidiaries. The environmental and social data provided includes information from subsidiaries and JVs with more than 50% of KMG shares.

The outside impacts of the organization are measured by socio-economic, environmental impact assessments of our operations on local communities in regions of operations and analysis of customer's feedback. Biodiversity and water indicators illustrate impacts outside the organization by reporting on regions under our influence.

Also, we did not include the indicators of the European subsidiary - KMG International, since they operate under EU legislation standards and published independent stand-alone G4 sustainability report.

We report in line with IOGP requirements in order to benchmark our HSE performance against our industry peers. As one of the largest state employers, with over 80,000 people covering the entire oil & gas value chain, we are aware of our economic impact and aspire to disclose extensive information on our results and achievements. We have adopted a balanced disclosure and also present the challenges we face in the international and regional context and underline the directions of potential development.

Transparency is our key value in strengthening relations with stakeholders for informed decisions and fair business relations, in a very competitive international market. For this reason, as of this year, we report both in the national currency, tenge, and USD.

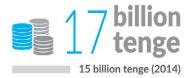
To translate global sustainability trends into our business strategy, we have extended our analysis to identify all the areas where KMG produces impact, together with the aspects which are of high relevance for our stakeholders. We conducted the materiality assessment in order to prioritize our efforts and future prospects.

All data is provided in relation to Group's direct activities and presented for the calendar years 2014 and 2015 for the purpose of comparison. For certain key data the previous three years have been published. For some performance indicators the data on onshore and offshore activities is disclosed separately.

The structure of the report follows the sustainability strategic areas of KMG: our people and the workplace, with a high focus on the safety culture and the environmental figures, as well as key studies from projects developed in the regions of operations for local communities and projects implemented in collaboration with our partners.

The Sustainability Report of KMG is approved by the BOD and brought to the attention of Stakeholders through different channels of communication, such as publishing on a company website and distribution of printed editions.

SOCIAL AID TO KMG EMPLOYEES



WORK-RELATED INJURIES



76 (2014) out of which 4 were fatal accidents (6 B 2014)

KMG GROUP PROCUREMENT

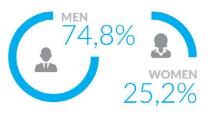


CHARITY & SPONSORSHIP



KMG EMPLOYEES









TURNOVER RATE 8.0% (2014)

5,75 mln.

mln tons of CO2 emissions

the majority of subsidiaries' level of gas O C O/ utilization amounted to 75%



80% of our subsidiaries and affiliated companies have implemented energy management systems in accordance with international standard ISO 50001

reduction in energy 10,2%

3% of total energy consumption in Kazakhstan is by KMG

87 mln³

Total water withdrawal



OIL AND GAS **EXPLORATION** AND PRODUCTION

450 000 barrles of oil per day



OIL AND GAS **TRANSPORTATION**

1 000 000 barrles of oil per day

m³ gas per day

281 000 000

275 000 barrels of oil per day

AND MARKETING

OIL REFINING

ҚазМұнайГаз

50 000 vehicles per day



- Drilling services
- Land and air transport
- Support of offshore operations
- Production of drilling fluids
- Mechanical engineering
- Construction of facilities















A Message from Our Chairman & CEO

Dear partners and shareholders!

Today it is not possible to increase company market value without such indicators as business reputation, an index of a sustainable development for the business world that illustrates companys and activities regarding the environment, work safety, corporate management, personnel and social issues.

As a leading player in the oil and gas industry of Kazakhstan, KMG pays close attention to programs of sustainable development and social responsibility.

The non-financial reporting, presented in this report, comprises comprehensive information on company activities in the field of environment, production safety, social responsibility, development of personnel and public relations.

The 2015 reporting year was devoted to strengthening of these areas. Efficiency of our departments responsible for life and human health has considerably increased. At present we can confidently say that our work on occupational health and safety has significantly improved.

In the area of environment, work was conducted in the field of air quality management, waste management, energy efficiency, conservation of biodiversity in regions we operate. We carry out monitoring of environmental risks, arrange public hearings, are open to dialogue and aim to continuously improve our environmental protection management system.

In the current market climate we have achieved our planned operational performance, with the same number of workers at pre-crisis level of social guarantees. At meetings with employees we monitor «social stability» in our production divisions and conduct collective agreements with labor unions.

Sociological surveys conducted in 2015 KMG indicate that we have considerably improved in the rating of social stability, in comparison with 2014. To a large extent it was promoted by the implementation of new programs, such as: the development of a Unified labour remuneration system, creation of a "Succession pool" and some others. Systemic work in this direction resulted in the development of a fair remuneration methodology that was further adapted in KMG subsidiaries.

KMG continues its active participation in solving of employment, education, health care, and sport related issues in operational regions. Annually we sponsor and provide charitable donations to honored oil industry workers and veterans of the Great Patriotic War. Our company provides targeted funding of orphanages and boarding schools, physically disabled people, pensioners and low income families. We sponsor educational and health projects; we promote the development of a state language and cultural heritage. We promote Kazakhstani sports activities and events, such as: annual sponsorship of the national federations of boxing, tennis and judo. In 2015, we spent a total of 6,8 billion tenge for charity and sponsorship programs.

As a national company, we intend to develop further programs in the sphere of the Sustainable development. We maintain that the concept «successful business» and «socially responsible business» are absolute synonyms. Informational transparency, actions aimed at ecological and production safety activities and social stability in the regions of operations are elements of critical success factors for responsible business practice.

We are proud to be playing our part in the development of Kazakhstan's social and economic fabric. We believe that KMG can make a long-term and, valuable contribution to sustainable development of Kazakhstan.

Faithfully,

Chairman of the Board JSC NC «KazMunayGas» Sauat Mynbayev

Chairman of the Board JSC NC «KazMunayGas»

Sauat Mynbayev





Interview with our Senior Vice-President

What does sustainable development mean to KazMunayGas? How do you understand sustainability in the context of 2015, and particularly in the oil & gas sector?

2015 was a significant year for the global community, with the 2030 UN sustainable development agenda adopted in September, and the COP Paris conference held in December governing climate change reduction measures from 2020.

2015 also proved to be a challenging business environment in our industry, with the lowest oil prices in more than a decade.

Today, fossil fuels meet more than 80% of the global energy needs and Kazakhstan ranks 12th in the world in terms of oil reserves. As the largest national oil & gas producer, we understand our position and challenges. Thus, for us sustainable development is not a trend nor an addition to business operations, but simply something we must do to protect our employees, local communities and the environment.

It is crucial for us to integrate SD principles in all our operations from exploration and production to refining, trading and retail.

Sustainability means operating business with responsibility, with respect for people and their safety, local communities and the environment, and we will go the extra mile to achieve it.

Given that KMG is a very large company, how do you engage all subsidiaries and stakeholders on the journey towards sustainable development?

One of our guiding principles, and the first step to accountability, is transparency regarding our

performance. Subsidiaries provide their support in disclosing data on their non-financial impact for this report, and also adhere to our common sustainable development efforts.

Since sustainability incorporates economic, social and environmental processes, we want our stakeholders to understand the operational challenges and risks we encounter and we constantly seek ways to garner their support in moving forward.

An important partner is our local communities. We know that cooperation ensures the best outcomes and shared value. Thus, we hold public consultations before commencing any new projects to assess their needs and our social and environmental impact: we constantly engage in dialogues on what programs to introduce in order to ensure a continuous social wealth improvement. An excellent example is the Memorandum of Understanding we signed with the Mayor of Kyzylorda according to which community members benefit from natural gas at a preferential price. Other projects have been undertaken in the region of Mangistau, where we developed social programs and provided financial support for medical trainings in the value of \$1 million.

By issuing this report, we communicate our performance to the larger family of stakeholders, and look forward to receiving their feedback in order to measure our progress and collaborate in view of future improvements.

What were the focus areas of sustainability work in 2015? What is the nature of the projects in these areas throughout the reporting period?

Safety is a priority for our company. Although we had a strong focus on safety in 2015,

we lost 3 colleagues in upstream and 1 in midstream and a further 99 workers were injured. Incidents of this nature are unacceptable.

The only way we can continue to develop in a sustainable way is by operating safely. That is why we will continue to invest in training, develop awareness campaigns such as "Chronic unease" (in collaboration with Shell) and "Golden Rules" to heighten vigilance, and other initiatives that ensure the safety of our teams and the integrity of our assets.

Our corporate office conducted 24 in depth safety audits in 2015, and one of the main goals was improving reporting transparency of HSE (Health Safety and Environment) related information. This was significant as it required new management behaviors towards reporting, and has allowed us to understand where our problem areas are in order to address them.

We aspire to be in the Top Quartile of IOGP companies in terms of HSE performance by 2020. To achieve this goal, we have developed a 5-year roadmap that aims to improve the overall HSE performance. By implementing our initiatives, we aim to reduce the ratios of fatality accidents and lost time injuries.

We acknowledge the environmental impact of our operations. Therefore, our specialists have developed and implemented Climate Action programs and introduced initiatives on effective resource management. For example, we plan to decrease the amount of water withdrawal in the future. In addition, we conducted energy audits and developed a 5-year action plan for energy conservation and efficiency that will allow us to reduce our energy consumption by 7%.

First Deputy Chairman JSC NC «KazMunayGas» Christopher Hopkinson

How do you address issues of climate change?

Oil and gas are vital resources for socio-economic development of Kazakhstan and remain core to our business. Climate change is a growing concern and in order to continue business as usual we should consider it every time we take a strategic decision. We have plans to reduce our contribution to climate change and respond to risks and opportunities posed by this issue. For example, the two pilot methane detection projects we launched in 2015 have allowed us to put mitigation plans in place to curb methane emission into the atmosphere.

Our main goal is 100% associated gas utilization, (zero flaring) in the very near future. Therefore, we have also endorsed the World Bank's Initiative on "Zero Routine Flaring by 2030".

Our strategy also includes working with industry partners and governmental institutions to establish an effective policy and technological framework for reducing GHG (Greenhouse Gas) emissions. These actions already resulted in significant reductions of CO₂ emissions.

What are the company's sustainability plans for 2016?

A strong sustainability strategy, with a focus on building the corporate culture at all levels with all employees and achieving tangible results in terms of HSE, community development, human resources is essential to our business success.

As national company, with over 80,000 employees and a top tax payer, we have an obligation to be consistent and develop for the long term, to deliver a significant portion of the country's energy needs to support economic growth.

Our goal is that KMG becomes a leader in what we do, not only financially and operationally, but with regards to sustainable development as this enhances long-term value and reliable business partnerships.





The Board of Directors



Yerlan Baimuratov

Independent Director



Peter Lane

Independent Director



Christopher Walton

Independent Director



Sauat Mynbayev

Group CEO



Frank Kuijlaars

Chairman of the Board of Directors



Dauren Yerdebay

Representative of our Shareholders



Nurlan Rakhmetov

Representative of our Shareholders



Nomination and Remuneration Committee

- assists the BOD with recommendations on succession planning of the Board of Directors and Management Board
- provides a constant and objective assessment of the employees
- ensures effective human resources policy, and remuneration
- ensures social support, professional development and training of employees



Strategy and Innovation Committee

- drafts strategic development plans and investment policies
- recommends corporate governance improvements,
- provides planning of financial and economic activities
- ♦ In 2016, the focus area of this committee will extend with sustainable development responsibilities



Finance Committ<u>ee</u>

- provides recommendations on effective financial policies
- assesses the financial stability
- monitors the implementation of KMG financial strategy

- overviews the issues of both internal and external audits
- overviews aspects related to financial reporting and risk management

Our ambition is to **enter top 30** largest oil and gas companies in the world in terms of oil and condensate.

KMG consists of 202 organizations that shape the KMG Group of Companies, which was founded in 2002. The founder of KMG is the Government of the Republic of Kazakhstan represented by the Committee for State Property and Privatization of the Ministry of Finance. KMG shareholders are JSC Sovereign Wealth Fund «Samruk-Kazyna» (hereafter - Samruk-Kazyna Fund) (90%) and the National Bank of the Republic of Kazakhstan (10% + 1 share).

KMG Board of Directors (BOD) determines the priority directions of the Company's business activity, approves the development strategy, taking into account economic, environmental and social impacts, and monitors the implementation of its strategy.

The topics submitted for the agenda of the BOD are discussed within preliminary BOD committee meetings. BOD decisions, adopted during internal meetings, are recorded with complete details by the Corporate Secretariat; this entity acting as a liaison between the governance bodies and structural units delivers the orders issued by BOD to the Management Board and internal audit, and keeps the Board informed on the implementation timeline.

Mission, Vision, Values

According to the Development Strategy of KMG to 2050, the mission of KMG is ensuring maximum benefits for the Republic of Kazakhstan from participation in development of the national oil and gas industry and through incorporation of sustainable development.

We aim to increase return on investments and the Group's value, while respecting the principles of sustainability and providing quality products and services.

We aim to become an effective oil and natural gas group of companies with increased financial stability, respecting the highest safety standards in our production facilities and corporate governance principles.

In our daily work we are guided by the following corporate values:

Safety. The Company strives to ensure a safe environment inside and outside the organization, having as a key priority the health and safety of our employees.

Responsibility. The Company is acting with responsibility in fulfilling all the obligations undertaken in front of shareholders, partners, staff and the community at large.

Professionalism. The company is committed to interact with stakeholders in a highly professional manner and to provide proper working conditions and opportunities for the personal and professional development of employees.

Efficiency. The company is committed to continuous improvement of financial and operational performance, improvement of management practices and technological solutions.

Risk management approach

KMG Group is committed to full compliance with all the legislative norms, policies and standards applicable to our activities. We conduct extensive work on identifying potential risks resulting from our activities and implement necessary measures to mitigate or eliminate them. KMG created a separate Risk Department, Risk Management Committee within the Management Board and an Audit Committee within the Board of Directors. The company adopted KMG Group corporate risk management policy, the risk map and register of risks, along with a policy on management of financial risks. The BOD receives and considers reports on risk assessments on a quarterly basis. KMG BOD revises and approves risk appetite and tolerance limits and takes an active role in the development and endorsement of risk registry and risk mapping.



The corporate governance structure of KMG is constantly being improved, in order to meet international standards (ISO 9001, ISO 14001, ISO 27001) and to align with international best practices in this field.

Corporate Governance Rating



The 2016 – 2017 Corporate Governance Action Plan of KMG aims at continuing the implementation of processes, standards, and principles of corporate governance in the following areas:

- Risk management and internal control:
- Sustainable development, including development of KPIs for management;
- Remuneration and professional training of entry-level employees;
- The effectiveness of the Board of Directors;
- Relations with shareholders:
- Information disclosure.

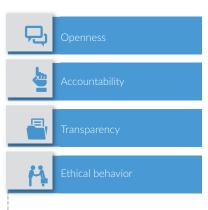


As a large, state oil & gas company, we recognize the importance of our impact on the economy, environment and society. We incorporate sustainable development principles and engage in thoughtful and rational interactions with stakeholders to balance our common interests.

Sustainable development is the development that meets the needs of the present generation without compromising the ability of future generations to meet their own needs (Report of the World Commission on Environment and Development "Our common future", United Nations, August 4, 1987).

We are not afraid of changes that are taking place in the World under the influence of a prolonged global crisis. We are ready for them. Now our task - keeping everything we have achieved over the years of independence, to continue sustainable development in the XXI Century. (Address of the President of the Republic of Kazakhstan Nursultan Nazarbayev to the People of Kazakhstan «Strategy – 2050", December 12, 2012).

OF SUSTAINABLE DEVELOPMENT



The Code of Ethics sets unified behavioral standards for all KMG workers, irrespective of their position, and reflects our core values and ethical principles that shape our work. In addition, the Code sets standards on interaction with colleagues, governmental authorities, our shareholders, subsidiaries, business partners, communities and media. The Code was approved by KMG BOD in 2010. Compliance with the Code is compulsory for all employees. Every 2 years, KMG's Board of Directors reviews the provisions of this Code, examines the extent to which they are implemented in practice and, if necessary, makes adjustments.

- Justice our decisions and actions are in line with the legislation, and are based on equal and just rights of all stakeholders
- Respect for human rights We respect and promote respect of human rights enshrined in the Constitution of the Republic of Kazakhstan and international documents such as the Universal Declaration of Human Rights.
- ♦ Intolerance to corruption corruption destroys the value created by our organizations for our shareholders, investors, other Stakeholders, and by society as a whole; we declare intolerance to the corruption in all its manifestations in collaboration with all Stakeholders.

♦ The prevention of conflict of interests

- serious violations related to conflict of interest may damage the reputation of KMG and undermine its credibility in front of shareholders and other stakeholders; in relationship with stakeholders we are obliged to act with respect, with honesty, integrity, fair and loyal, taking actions to prevent, detect and eliminate conflicts of interest;
- ♦ Leading by example approach each of us in our everyday actions, behavior and decision-making situations can contribute to the implementation of the principles of Sustainable Development. Top Management of the company states its commitment to SD principles.

Code of Ethics

Along with a variety of special services designed for identification and prevention of potential ethical abuses and minimizing their consequences, the Company also uses a corporate function of the Ombudsman, who is appointed by decision of the KMG BoD. In 2015, a road map to bring the mission concept was developed, the functions and tasks of the Ombudsman in compliance with international best practice. As part of this roadmap implementation a new «Regulations on the Ombudsman KMG» was developed and approved.

In 2015, 17 situations were signaled to the KMG Ombudsman. The subject of the conflict were the interpersonal, psychological and other conflicts in the workplace caused by the violation of ethical, procedural or legal norms of business conduct and code of business.

We have in place various mechanisms through which employees, business partners and stakeholders may report any form of corporate misconduct:

- Employees by contacting direct line manager, or next level manager; or by contacting Ombudsman;
- Both from inside and outside the organization - via phone 786565, through KMG trust line email: doverie@ kmg.kz (information may be submitted anonymously).

In case of violation of KMG approved norms of business ethics, the data collected on the non-conformity issue is submitted for the consideration of the KMG Committee on Social Responsibility and Business Ethics, with the mandatory participation of the Ombudsman. The rights of appeal of any person shall not be infringed. The members of the KMG Committee on Social Responsibility and Business Ethics guarantee the confidentiality of the consideration of information on violation of the Code.

The Code of Ethics is available to stakeholders on the official website of the company in three languages - Kazakh, English, and Russian and on internal e-base EBD ISM.

Anti-corruption

The Economic Security Policy of KMG, approved by the Board of Directors in 2014. The document includes the core aspects of KMG's activity in anti-corruption, fraud and other unlawful phenomena. Similar documents have been developed in KTG, KTO, KMG EP, KMG RM, and KMT. This Policy has been placed on KMG corporate website in Kazakh, English and Russian languages to ensure 100% access and awareness of all the employees and other co-interested parties. Informative amendments on anti-corruption topics have been introduced to the employment agreements and internal documents, related to recruitment, placement and onboarding of employees.

Any employee of KMG or any other person is entitled to inform the management of KMG, the direct manager or the authorized unit in case of any doubt regarding the validity of actions of any employee, contractor or other persons cooperating with KMG. These reports can be communicated through email and trust lines, and treated with confidentiality. The trust line number and the e-mail address are placed on the corporate website. Analogous information is available on the sites of subsidiaries.

In accordance with the Rules on the organization of Risk management procedure of KMG, approved through the Decision of the Management Board we evaluate the risks concerning corruption in all subsidiaries and affiliated companies.



1 / situations were signaled to the KMG Ombudsman



Organized trainings and seminars on anti-corruption, with the participation of employees, representatives of the state authority and political parties.



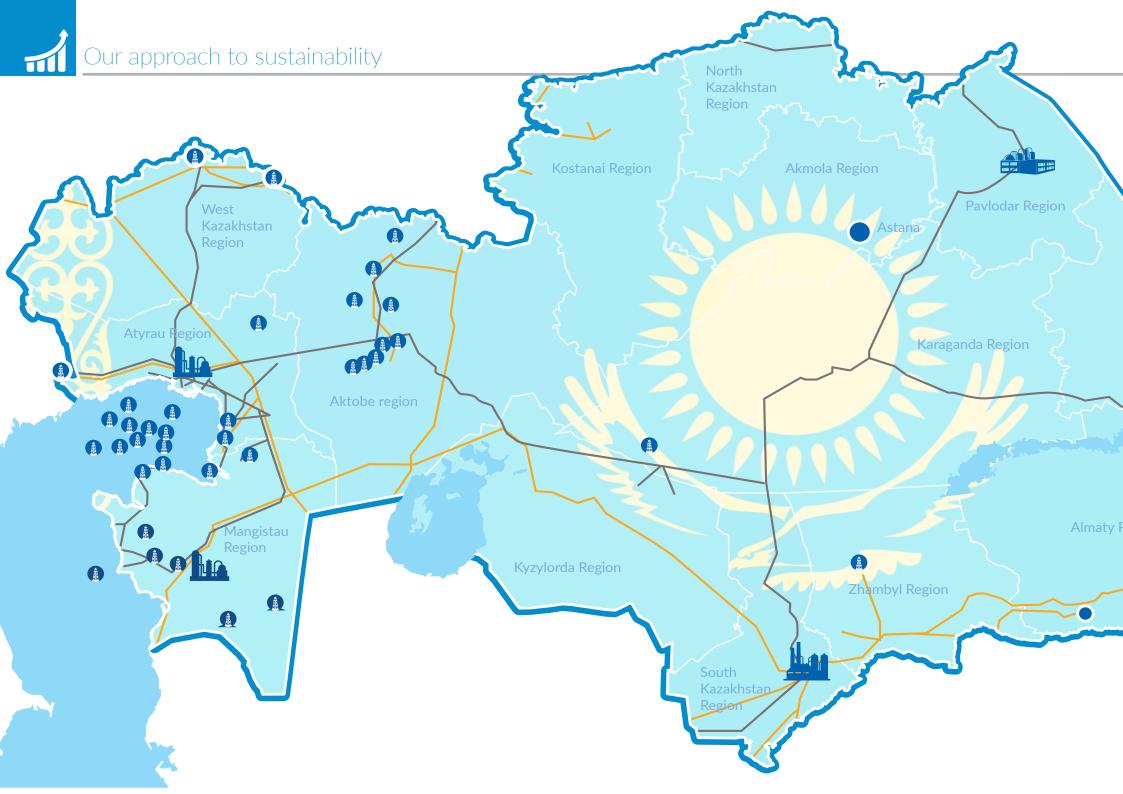
In 2015 we communicated our anti-corruption policies

to 1874 suppliers and 155 other business partners



In 2015 there were no registered cases of corruption at the level of KMG and its subsidiaries, or related to contractors and partners.







Our Operations and Assets

KMG is in the Complex Action Plan for privatization, also there is an active program to simplify the Group structure in the framework of implementation of action plans for restructuring of KMG assets, approved by the Board of Directors. In 2015, at KMG group level 31 companies have been restructured, and the restructuring of 12 companies has been partially implemented.

Membership and Affiliations

As a key player on Kazakhstan's oil & gas market, we engage with a wide range of industry associations, actively participate in forums, national and international conferences.



Chamber of Commerce

As a member of the National Chamber of Commerce "Atameken"

(Chamber), KMG is a proactive participant in activities related to legislation improvements. In 2015, with the help of KMG contributions, the Chamber reviewed more than 300 claims, developed 110 investment projects for regional development and provided more than 2500 of consulting services free of charge for small businesses



KazEnergy:

Kazakhstan Association of oil and gas companies «KazEnergy» is a non-

commercial organization, established in 2006, to support Oil and Gas enterprises and forge relationships among state authorities and Oil and gas industry. Since the Association was founded KMG has been playing a crucial role in the development and implementation of its initiatives and programs.

The management and employees of KMG are involved in several steering committees and working groups of the Association.

Chairing Coordinating Councils on ecology, social responsibility and transparency provides KMG with an opportunity to promote the concept of SD in the oil & gas industry of Kazakhstan.



International Association of Oil Transporters (IAOT):

In 2015, JSC "KazTransOil" (KTO) became a member of IAOT to strengthen international oil transportation systems. The association addresses issues related to tariff formation, diagnosis and exploitation of pipelines, oil transportation and storage. As a member of IAOT, KTO also participates in Energy working group to share information and experiences in the field of energy efficiency and to benchmark the performance with other members association



in the Caspian region.

Oil Spill Response Limited (OSRL)

LPP "KMG Systems and Services" is a member of International association on oil spills response. Membership with OSRL guarantees readiness for liquidation of emergency oil spills of 2nd and 2rd level. Also it assists with minimization of safety risks, environmental protection during offshore works

Our approach to sustainability

2015: "YEAR OF HSE"

In 2015 KMG Group focused on health, safety and environment. Our activities in the field of environmental protection were shaped by the "Concept for transition of Kazakhstan to Green Economy", whereas the UN Millennium SD goals have influenced our actions in the field of occupational health and safety.

Moreover, as we stay committed to our principle of treating local communities with dignity and respect, we keep looking for new ways to ensure social stability in the regions where we operate. In 2015 we started an innovative technique for measuring the social stability in these regions. This tool enables us to identify the areas of social stress and concentrate our activities on improvements in these particular regions. Such target-based approach allows us to develop specific preventive measures that better meets and fulfills the community expectations.

Our sustainable development strategy, as a national company, is aligned with the development of the State

In order to contribute to the implementation of national plans such as "Strategy 2050", "Conception of Kazakhstan on transition to green economy" and Kazakhstan's environmental commitments to the international initiatives/frameworks, such as Rio de Janeiro principles, Paris Agreement and World Bank "Zero Routine Flaring by 2030".

Our work on occupational safety has been dedicated to raising awareness around this theme and to increase reporting transparency. We have achieved significant results, a more than four-fold increase in the reporting

transparency and concrete evidence of increased commitment of our people, including changes in the safety behavior. Programs and initiatives implemented can be found in the Environmental part of the report.

In order to contribute to the implementation of the 3rd Millennium Sustainable Development Goal "good health & wellbeing", we have conducted extensive work on improving the health conditions of our workforce, starting with benchmarking the "health status" of the employees. Following the results of our analysis, we investigated a number of health issues in upstream and service companies of the Mangystau region and created actions to improve the situation.

Direction of work in 2016

We contribute to the aims set by the development strategy of Kazakhstan on local, national and international levels towards long-term economic growth, environmental protection and social development.

Our targets for 2016 are based on the analysis of 2015 results, the gaps and weaknesses identified in our work, expectations of our sole shareholder, international best practicies and local communities we operate in.

Therefore, HSE continues to be our focus in 2016 to continue developing the safety culture through leadership engagement, employee empowerment, training of our supervisors and workers and awareness campaigns to raise the visibility of HSE.

KMG fully dedicates its efforts to minimize the consequences of our activities. This in turn will contribute to implementation of Kazakhstan's climate action plans, such as the country's target of 15%-25% reduction in GHG emissions

by 2030 compared to the base year of 1990 as stated in the Intended Nationally Determined Contribution (INDC) to the Paris Agreement.

Moreover, we continue to pursue the course set by the President of Kazakhstan in his Address to the nation in 2015, "Kazakhstan – 2050 strategy" and the Conception of Kazakhstan on transition to Green economy. We have conducted energy audits in our subsidiaries to develop an energy efficiency Road map in 2016 with further implementation of the action plans in KMG subsidiaries.

The chosen direction of work can contribute to building long-term economic growth of our company, increase its value, strengthen company's position on the international market and make it more resilient to the fluctuations from the oil and gas industry.

Our stakeholders

We have a wide range of stakeholders that are influenced by our activities or can have an impact on our success, are kept informed regularly, whether they are individuals or large scale organizations.

One of our main goals, stated in the Corporate Governance Code, is to build trusted relationships with our stakeholders through transparent reporting.

We understand the importance of our impact on the national economy, environment and societywhile seeking the long-term growth of our business, hence we ensure to take into account balanced interests and expectations of all our stakeholders.

Given the different nature of our stakeholders we have a number of mechanisms in place for constant engagement with each of them, via meetings, seminars, forums, direct discussions, joint partnerships, focus groups etc.

Our guiding environmental principles throughout the year were national goals of the Green Economy Concept:



increasing the welfare of the population and the quality of the environment through costeffective ways to mitigate the pressure on the environment;



increasing the efficiency of resource use and improving management practices.

We have chosen the following HSE targets:

Occupational safety:

★ to increase reporting transparency

Occupational health:

 to improve health conditions of our workers, particular the Mangystau region

Environmental protection:

to decrease flaring of associated petroleum gas

The list of Stakeholders includes, but not limited to:	Contribution, impact	Expectations, interest	Our approach to engagement & addressing topics & areas of interest	
Employees, officials	Human resources, loyalty, Labour productivity, occupational and environmental safety	Competitive salary, proper & safe labor conditions, professional development, respect of human rights, social guarantees and compensations	General meetings, quarterly & annual reports; constant, direct interactions at various management levels; focus group discussions, surveys, corporate websites, hotlines, informational desks	
Shareholders	Financial resources (equity capital, loans); regulatory documents for the Fund's subsidiaries	Profitability of investments, timely payment of dividends, interest; maintenance of reputational image, increase of reserve, improvements of corporate governance	Code of conduct; internal policies & standards; reports; operational and financial performance feedback; engagement surveys; internal newspapers	
Subsidiaries	Operational activities, compliance with legislation, internal normative documents, maintenance of reputational image	Development of a quality internal regulatory documents base, representation of interests in front of governmental authorities, associations	Code of conduct; internal policies & standards; reports; audits; meetings; constant, direct interactions at various management levels; engagement surveys; internal newspapers	
Local communities, population in places of activity, public organizations	Support in places of activity; Loyalty and support of local authorities; Favorable attitude; cooperation	Creation of new jobs, development of the region; ecological stability; transparency	annual reports; Environmental Impact Assessment; community meetings; foundations & trusts; social projects; funds & trusts; feedback on reports and quality of services and products; publications in media and company's official website; site visits; hotlines, mailing services	
Government, state authorities	State regulation; taxes and royalties	Compliance with legislation; Creation of new jobs, Taxes, enhancement of socio-economic development of regions solving; ecological stability; responsible and efficient use of labour and natural resources; transparency	Audits; ecological expertise; Memorandums on cooperation; participation in events, forums & working groups; responses to requests for information; state statistical reports	
Suppliers	Supply of resources (goods, works and services) to add value	Reliable market, constant customer's credit worthiness; Compliance with contractual obligations,	Кодекс деловой этики; политики и стандарты; социально ответственное партнерство; партнерство для поддержания местного содержания	
Labor unions	Promoting social stability, regulating labor relations and conflicts resolution	Respect for employees' rights in all entities where KMG holds any % of shares, social guarantees and compensations	Meetings of executives with labour unions; community meetings; collective agreements; EIA; regular meetings and personal communications; hotlines	
Clients	Financial resources by procurement of products (goods and services) of the Organization	High-quality, safe products and services at affordable price	Participation in multi-stakeholder forums; feedback on reports and quality of services and products; publications in media and company's official website; site visits; hotlines, mailing services	
Associations	Creating a platform for interaction and exchange of experience with other oil and gas organizations and government agencies.	Active participation in working groups, sponsorship, transparency, representation and building relationships with government agencies, best practices and innovations.	Participation in industry forums, conferences; membership in the working groups on social and environmental issues; surveys and studies; regular meetings and personal interaction; publication in media and company's official website; hotlines; mailing services	

Our approach to sustainability

Sustainability issues identified as "material" for KMG

In selecting the content for this report, we applied the "materiality principle". The materiality assessment takes into account that reported information covers topics and indicators which would substantively influence the assessments and decisions of the Group and stakeholders.

These are:

- The Group's impact as an oil & gas operator to the society and the environment.
- Management's requirements for information and market analysis.
- Conclusions from dialogues with co-interested groups.
- International initiatives and guidelines for sustainable development, especially GRI and good practice in the oil & gas industry.
- Disclosure requirements from stock exchanges, analysts, rating agencies, institutional investors and other interested parties.

The process of identifying relevant sustainability topics included internal and external documents and audit reports of the Samruk-Kazyna Fund, meetings, corporate policies and procedures, as well as surveys on various sustainability-related topics registered at the level of KMG

Employees of the Group were invited to evaluate the topics covered by the GRI indicators in terms of business impact including topics of personal interest which they would like to see disclosed in the report. The second step was to scale all the predefined items based on average results and list the topics

suggested by the respondents. The information for the report was gathered based on the priority level assigned after the consultation with stakeholders.

In addition, we have taken into considerations topics to be covered by "KazEnergy" in their 2015 report, since it is a consolidated report that represents areas of interest to all Kazakhstan oil & gas industry.

The results and the levels of disclosure considered the scale of importance to stakeholders, and the common vision of the sustainability reporting working team.

In 2015 we revised the list of our key stakeholders, which in turn strongly influenced the process of materiality matrix development. Closer engagement with our stakeholders broadened the scope of aspects identified as material for the reporting year of 2015.

Our goal is to prioritize the views according to their importance for the community and the Group, and subsequently plan for further actions.

Third party opinion



Association KazEnergy

acknowledge the active participation of KMG in norm-setting

activities to improve the environmental legislation of the RoK. Due to KMG activities in the field of environmental protection, changes are made to the regulations based on a balanced combination of economic growth and preservation of a favorable environment for future generations.

During 2015, with the active participation of the KMG, the business community successfully implemented amendments to the Environmental Code with the purpose of solving issues in the field of environmental protection.

Additionally, KMG members of the working groups presented the initiatives and proposals to the improvement of the labor legislation as part of drafting the Labour Code in 2015.

KMG has taken an active part in the development of the List of oil and gas industry professions, grouped by type of work and areas of professional activity, in which professions are allocated. This list is an important step towards the creation of sectoral occupational and educational standards.

KazEnergy recognize consecutive steps of KMG in the improvement of environmental legislation, sustainable development and social responsibility expanding in oil and gas industry of the Republic of Kazakhstan.

General Director, Bolat Akchulakov

Third party opinion



Society of Petroleum Engineers

On behalf of SPE Astana

Section, we would like to express our sincere appreciation to KMG Group for the support and active participation in our activities.

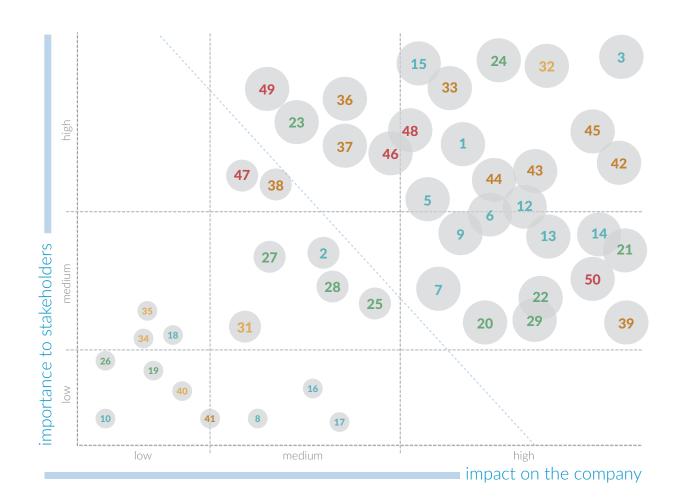
SPE Astana Section was established in April 2013 to collect, disseminate and exchange technical knowledge concerning the exploration, development and production of oil and gas resources among experts and students. Our platform provides opportunities for professionals to enhance their technical and professional competence. At the moment, more than 140 experts and 470 students are involved in our activities in Astana and they are representatives of national and private operators, service providers, consulting companies and national universities.

Since 2013, SPE Astana Section has hosted numerous events including Distinguished Lectures, Technical Presentation, Caspian Technical Conference and Exhibition (together with SPE International), Roundtable Discussions, Charity, Energy4Me and various social events.

We would like to express our gratitude to the top management of KMG Group for hosting lectures on "KMG – a company in transition", sharing their experience on KMG Transformation Program and active participation in SPE workshop "Key Upstream Science & Technology Challenges of the Oil and Gas Industry of Kazakhstan" during the KazEnergy Eurasian Forum.

Our joint work has been productive in 2015 and we looking forward to fruitful collaboration in future.

Sincerely, SPE Astana Section



- 1 Employment
- 2 Labour/Management Relations
- 3 Occupational Health and Safety
- 4 Training and education
- 5 Diversity and equal opportunity
- 6 Equal remuneration for women and men
- 7 Supplier assessment for Labour Practices
- 8 Labour practices Grievance mechanisms

- 9 Investment
- 10 Non-discrimination
- 1 Freedom of association and collective bargaining
- 12 Child Labor
- 13 Forced or compulsory labor
- 14 Security practices
- 15 Indigenous rights
- 16 Assessment

- 17 Supplier human rights assessment
- 18 Human rights grievance mechanisms
- 19 Materials
- 20 Energy
- 21 Water
- 22 Biodiversity
- 23 Emissions
- 24 Effluents and Waste
- 25 Products and Services
- 26 Compliance
- 27 Transport
- 28 Overall
- 29 Supplier Environmental Assessment
- 30 Environmental Grievance Mechanisms
- 31 Local communities
- 32 Anti-corruption
- 33 Public policy
- 34 Anti-competitive behaviour
- 35 Compliance
- 36 Emergency preparedeness
- 37 Asset integrity & process safety
- 38 Involuntary resettlement
- 39 Supplier assessment for impacts on society
- 40 Grievance mechanisms for impacts on society
- Customer Health and Safety
- 42 Product and Service Labeling (reputation)
- 43 Marketing Communications
- 44 Customer Privacy
- 45 Compliance
- 46 Economic Performance
- Market Presence
- 48 Indirect economic impacts
- 49 Procurement Practices
- 50 Reserves



Our people



Our employees are our main value and main asset. The level of their professionalism and safety impacts directly on the results of our activity and the value created for investors. Therefore, we are striving to attract in an open and transparent manner the professional candidates from the labor market and educate our employees based on the principle of meritocracy, ensure their safety and develop motivational and development programs.

Occupational Safety & Health

According to KMG policy in the field of HSE, the main objective for 2012-2016 is to reduce the level of injuries and accidents at work, to ensure the safety of employees, to eliminate the damage to environment and preservation of assets, and to improve the image and reputation of KMG.

KMG HSE Transformation Committee monitors the HSE performance, identifies areas of improvement and makes recommendations in the field of occupational, health and process safety, and environmental protection.

We comply with requirements of the Republic of Kazakhstan Labor legislation for incidents and accidents reporting & investigation procedures. The major goal for 2015 was to identify and register all incidents that occurred in our subsidiaries, in particular the actual number of LTIs and motor vehicle accidents. Introduction of a KPI on «Reporting Transparency» (RT) for the management team was the first step on the way to improving the HSE culture of our people. The program on reporting transparency was initiated as on 36 LTIs were reported to corporate center in 2014, a figure considered low with the nature and range of our activities. After numerous audits conducted in 2015 a further 30 Lost Time Incidents were uncovered and added to the number reported for 2014.

Occupational and process safety indicators

Indicator	2014	2015
Hours worked (million)	183,60	181,20
Kilometers driven (million)	157,60	149,90
Work related fatalities	6	4
Work related FAR per 100 million man-hrs	3,26	2,18
Non-work related fatalities	18	19
Lost time injuries	36/68	99
LTIR per 1 million man-hrs	0,35	0,54
Motor vehicle accidents	10	66
MVAR per 1 million km driven	0,10	0,43
Total number of process safety events at production sites	2	3

Transparency and full disclosure on incidents allowed us to study and conduct a root cause analysis of all incidents, to identify the major risks and focus areas in 2016 to prevent reoccurrence of similar incidents.

We aspire to be in the Top Quartile of IOGP companies in terms of HSE by 2020 In 2015, to improve safety culture and decrease occupational injuries we implemented the following:

- ▲ Introduction and implementation of Golden
- Reporting Transparency KPI
- Implementation of 3 Policies:
 - HSE policy;
- --- Land transport safety policy
- ---- Alcohol and drug policy.

Also, we have developed an incident notification & investigation procedure. All of the programs, procedures and other regulatory documents were designed on a corporate level, with a further adaptation and endorsement in each KMG subsidiary.

An HSE awareness program was created and delivered to the workforce consisting of the following.

- ▲ A 10 minute Chronic Unease video developed by KMG in cooperation with Shell
- ▲ Lessons-learned reports delivered monthly to all employees
- ▲ General Directors Forum on a topic "Leadership in HSE"
- ▲ A corporate HSE intranet portal where all references to safety can be found
- ▲ Interactive materials (brochures, calendars, presentations) on "Golden Rules" for all emplovees
- △ 24 safety audits conducted in 2015 by the corporate HSE team
- ▲ Working Groups for each HSE segment were created to tap into the expertise from across KMG.

Golden Rules





Drive safely, wear your seat belt. follow speed limits, don't use mobile device



Work with a

valid permit

when required



Verify isolaton before work begins and use the specified life protecting equipment





Obtain authorization before entering a confined space

Protect vourself against a fall when working at height





Position yourself in a safe zone near moving and energized equipment

Lifting operations safetv



Four fold increase in Reporting Transparency



75% of all 99 injuries in 2015 fall into four groups: Construction, Drilling and Workover, Maintenance and Transportation



70% of the injuries in 2015 were in the Upstream and the Services Business Units



80% of all 99 injuries in 2015 also fall into four groups: Slips/Trips/Falls, Falling from Height, Driving and Struck by





We comply with the following RoK legislation and international requirements in terms of health and safety of our employees: Labor Code, Health Code, Sanitary norms and regulations.

In 2015, 20 non-work related fatalities occurred, of which 70% were a result cardiovascular diseases. To address this issue we are developing a corporate wellness program in 2016. Moreover, in 2015, key KMG subsidiaries signed Collective Employment Agreements with Labour Unions that agreed on the liabilities and responsibilities of parties in terms of occupational health and safety. These Agreements also include measures on safe working conditions, social guarantees, compensations and hardship allowances for improvement of workers' health status.

The health status of workers is monitored on a regular basis through:

- Annual medical check-ups of workers:
- Pre-shift medical examinations:
- Periodic attestation of facilities for working conditions assessment.

To promote a healthy life style and effectively manage occupational health issues we completed the following actions in 2015:

- Created an occupational health and hygiene working group with representatives from different business units of KMG and conducted several meetings at production units:
- Occupational safety specialists are identified and assigned where needed;
- Completed 16 audits to ensure the compliance with corporate and state requirements;
- Audited facilities, dorms, canteens and medical points at production units;
- Subsidiaries developed action plans for 2016 to improve the health management system and prevention of illnesses.

Process safety

We aim to comply with the international standards such as API and DNV to ensure continuous improvement of process safety management systems.

To raise awareness about process safety risks all subsidiaries are informed about the events that occurr in KMG through shared flash alerts and lessons learned reports.

In 2015, 3 process safety events of loss of primary containment with insignificant financial damages and with no injuries occurred.

Types and severities of incidents and accidents are based on legislation requirements. However, to comply with the international reporting standards and to benchmark our performance with other international Oil and Gas companies, we will also report to IOGP standards in 2016.

Risk-based approach for Asset Integrity Management will be introduced.

A 5-year action plan has been developed that includes:

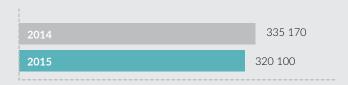
- determination of the current state of equipment integrity;
- determination of the number of ruptures on pipelines;
- development of the corporate standard;
- trainings and workshops for management teams and HSE specialists:
- GAP-analysis of cost effectivness of asset programs;
- development and introduction of KPIs;
- allocation of budget for intended actions.

Non-work Related Fatalities

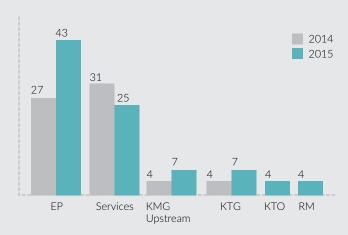


cardio-vascular diseases a reason of 70% of cases

Sick leaves (days)



LTIs by Business Unit in 2015



Care for our people

The KMG Group of companies introduced a guaranteed social package which includes different types of social benefits and compensations, such as: payments related to paternity and bereavement leave, monthly payments to employees on maternity leave up to the age of 1.5 years of the child, compensation for termination of employment (if it is found impossible to transfer to another job due to loss of the general capacity for work), disablement benefit, one-time payment owing to employee's death for funeral costs, and a one-time payment to a victim's family resulting from an occupational accident.

The company provides social guarantees for voluntary health insurance, arrangement of vacation of the employees' children in holiday camps across
Kazakhstan

Additionally, employees are provided with social benefits such as milestone birthday payments, marriage benefits, marriage leave, paternity leave, bereavement leave, medical treatment leave, to disabled employees, employees' disabled children and many more.

In addition to individual pension accumulations of each employee, the KMG Group of companies implemented a retirement program, which allows retired employees to receive material aid from the organization where they have been working for more than 3 years. According to KMG internal rules on interaction with unemployed retirees, our retired employees are provided with material aid for holidays, milestone birthdays, medical treatment, sanatorium-resort therapy, subscription to newspapers and magazine etc. We have established a Reserve/Fund that enables us to fund additional benefits.

Plans for 2016

- Seat belts installation in all KMG owned vehicles (90% implemented);
- Contractors Reporting Management;
- Root cause analysis;
- New HSE organizational model;
- HSE Management System;
- Annual HSE leadership forums and trainings for middle and executive management with focus on root causes analysis and risk identification;
- Wellness program;
- Behavioral Safety Audits;
- Safety Culture Survey;
- Supervisors Safety Handbook:
- Train the Trainer HSE program for Fieldworkers;
- Generate a Total Recordable Injury Rate (TRIR), including Medical Treatment Cases (MTC).







Employee Development

We continue to invest in the educational system and the professional development of our employees. Our goal is to support the necessary level of staff taking into account the requirements and perspectives of KMG strategic development.

> In 2015, a new training model concept of KMG staff (70/20/10) was developed and approved, 70% - on the job training, 20% - internal training, 10% - external training.

This training was developed with the Kazakh British Technical University (KBTU). The following activities have been implemented:

- agranted access to the information base and library of KBTU for KMG employees and Succession pool members;
- developed and approved procedure of KMG internal trainers;
- organized transfer of gained knowledge by employees who have been trained;
- developed a questionnaire for managers and employees to assess the effectiveness of training;
- approved a plan of mandatory training activities for execution of external training.

In order to implement an individual development plan for the «Succession pool» of KMG group of companies in 2015, KBTU developed a modular training program and conducted 10 workshops for 29 succession pool members. In addition, training for Executive MBA program was organized for 6 succession pool members.

Dual education

KMG launched pilot projects for dual training: Pavlodar Refinery, ICA and EMG, 60% of training in the company, 40% in a college.

- ▲ At the Pavlodar Refinery in 2015 79 students of Pavlodar Chemical and Mechanical College did practical training, where 31 college graduates were further employed.
- In 2015, a pilot project was launched in EMG. for 39 students of the Atyrau Oil and Gas Institute.
- Every year around 3500 students undertake internship or pre-graduation practical training as in the central offices of the organizations. as well as in industrial branches.



Trainings of KMG employees





Number of workers recieved HSE trainings



Number of training events in 2015



Trainings and professional development of workers is done irrespectively of gender or working position

Personnel Motivation

Our approach to personnel motivation is based on the principles of ensuring appropriate compensation, transparency and respect of the employees' rights by undertaking employment and collective agreements with employees.

Unified labor remuneration system

As part of the Republic of Kazakhstan Government order, introduced by the President in the Message to the people of Kazakhstan «Strategy «Kazakhstan – 2050» regarding the implementation of new legislative measures on equal and fair remuneration, KMG developed a unified labour remuneration system (ULRS) applicable to employees of KMG subsidiaries in 2013-2014.

Since 2013 the ULRS implementation took place in MMG, ANS, KMG EP and MMG. In 2016-2017 we plan a reorganization of the remuneration system with full implementation of ULRS in Midstream and Downstream.

This system enables us to base the salaries of our employees on factors such as their functional duties and complexity of performed tasks and ensure absence of differences by gender or regional belonging.

Within actions for improvement of remuneration system the management of KMG has approved the approach of positions assessment starting from administrative employees of the corporate center to the top management level of operational subsidiaries per methodology of the global management HR consulting firm. Currently, we are implementing a system of remuneration of administrative personnel that is based on productivity and motivation.

Employee evaluation

The procedure for employee evaluation has been approved since 2004 and is aimed at determining the effectiveness of performed work on specific criteria for measuring results, encouraging promotions and tangible and intangible rewards in KMG.

The procedure is governed by the "KMG Rules of Assessment of the administrative staff" and is based on two types of evaluation: of professional development and of performance.

Evaluation of performance is carried out on a quarterly basis, based on the goals set for the year.

Evaluation of professional development is held annually and for non-financial incentives - Evaluation Commission may recommend enrollment in the succession pool, promotion, rotation in the KMG group of companies, individual training or other professional development opportunities.

In addition, in 2015, a standard model for business competence of executives, management and administrative staff in the KMG Group of companies was approved.

Third party opinion



Labour Union

Since the establishment of the "Oil and Gas Industry Workers

Labor Union", our common goals with KMG are the development of the social partnership, enhancement of the role of labor unions as an effective model for social and labor relations, strengthening the social stability in communities and ensuring health and safety at a workplace.

In 2015, together with KMG, we have conducted a Chairman's Award for the best idea in the field of HSE. The Award was well accepted and highly appreciated by local labour unions, our management team and employees.

We are pleased that together we have been able to attract more than 180 participants and increase the involvement of employees to address HSE issues. As representatives of employees of oil and gas industry, we express our willingness to participate in any socially significant initiatives and looking forward for productive and long-term cooperation with KMG.

Kaliyev Sultan, Head of O&G Industry Labour Union



In 2015 the employees of KMG subsidiaries were provided with social aid in the amount equal to approximately KZT 17 bin (\$77 min)*



Retirees were provided with social support for a total amount of 700 million tenge (\$3,153 mln).



200 million tenge (\$904,000) on HSE training



During 2015 quarterly performance evaluations were performed for 75-77% of KMG employee

* Average currency rate for 2015 was UHD: 221,73 tenge per 1\$



Human rights

We comply with the legislation of the Republic of Kazakhstan and with internal policies and procedures in place in each KMG subsidiary.

We faithfully state that:

- KMG ensures absence of any kind of discrimination: all workers are treated in an equal manner, independently of their race. religion, gender, ethnicity, disability and sexual orientation;
- KMG does not use child labor;
- KMG does not practice or tolerate forced labor:
- KMG acknowledges the right of each employee to join collective agreements and be a part of a labor union:
- KMG respects the rights and needs of indigenous communities in the regions of our operations. We are always open for a dialog and to discuss and solve any concerns through our community meetings and other grievance mechanisms we have in place.

To enhance social wellbeing of every employee, strengthen the employer's and employees' responsibility for the productive and economic activity and to achieve the optimal balance of all parties' interests under the social partnership, collective agreements are concluded in all KMG Group entities.

KMG developed a standard form of a collective agreement, which specifies the conditions and uniform mechanisms of labor remuneration, labor hours and off-work time, health and safety, employment of discharged employees, social support etc., recommended by the Republic of Kazakhstan legislation and employer.

Grievance mechanisms

Our Human Resources and Labor Remuneration Block conducts regular work on prevention of labor disputes and conflicts in subsidiaries and affiliated companies. Constant monitoring and adoption of measures to prevent social tension allowed preserving stability in 2015.

In 2015, the number of appeals on labour practices decreased from 52 in 2014 to 29.

In accordance with the Model Rules of KMG Unified Internal Communications System, introduction of internal communications tools is under implementation. In order to maintain engagement with workers we have regular meeting of top and line management with employees throughout the year, where we report on our activities. Pursuant to the requirements specified by the Rules, summary meetings of KMG subsidiaries first executives with the personnel are held twice a year, meetings between line managers and the personnel are held every quarter, as well as the meetings between senior executives and unions or with the personnel's representatives.

Additionally, other tools are used to ensure information exchange, such as corporate sites. hot lines, information stands, staff suggestion boards and other aspects.

We conduct audio conferences, on a regular basis, with our subsidiaries on social issues to monitor the current situation at the local level and, if necessary, take appropriate measures. An automated system of social stability monitoring is being introduced in MMG and ANS subsidiaries. This toolbox allows data acquisition from subsidiaries, to a centralized database and transfer of information on the social climate, allowing the ability to take preventative measures well in advance of social tension.

Third party opinion



Our team of Nazarbayev University graduate students is the first group of students whose thesis project is conducted jointly with KMG Group. It has been a long process before we have chosen the topic for our project and we would like to thank the management of KMG for their collaboration and an opportunity to contribute to the development of the company.

Following the discussions on current issues in KMG, we decided to implement the project on "Ideas Management at KMG". The main aim of the project is to provide employees with mechanisms for informing managers about their ideas and solutions.

In order for our project to become useful and applicable at KMG, we are planning to use an integrated approach. Firstly, we will assess the current situation in KMG through questionnaires and interviews. Secondly, we will explore the best international practices in the field of innovative management. Finally, once we develop step-by-step system for ideas management and carry out the pilot projects in several subsidiaries.

We are thankful for the project opportunity and for technical and methodological support provided.

Nazarbayev University students



Collective agreements were effective in 37 operating companies of the KMG group of companies, covered approximately employees



The Model Rules of KMG Unified Internal System have been

introduced in 26 KMG subsidiaries

Number of appeals on labour practices



Case studies

Chairman's Award in the field of HSE



In order to strengthen the leadership role of management, increase the safety culture, motivate workers to participate in risk management, KMG initiated an annual contest for KMG Chairman's award on "The best innovative ideas and practices in the field of occupational health, safety and environmental protection.

32 KMG subsidiaries participated in the contest with a total of 181 applications received.

The winners were chosen based on the following criteria: transferability

across the KMG Group – ability to scale implementation; use of the most innovative ideas and experiences in HSE and value addition through reduced operating cost and reduced risk. The winners were awarded by the KMG Chairman and many ideas are now being implemented.

This contest not only generates innovative ideas and practices in HSE for their further implementation, but is also a powerful tool for the «HSE Awareness Campaign».

Youth Committee



In KMG we believe that young professionals are the future of the company and the nation. Therefore, we have created instruments for the development of young talent in all regions of our operations.

In 2014 we established the KMG Youth Committee that has served as a strong platform for sharing ideas and experiences and a bridge between young professionals and management for the past 2 years. Currently, Youth councils are established in 28 subsidiaries. To help our youth realize their potential we defined 5 key areas for their activities:

- professional development
- innovations
- social development
- charity
- sport

As part of this work, approximately 70 different thematic meetings, master-classes, trainings and discussions were held. The 2015 annual Youth Committee forum was held in Zerenda, Borovoe on "Occupational Safety". Where our youth was introduced to a number of new HSE initiatives and programs and had an open dialog with our CEO. We see our youth as a powerful channel to increase HSE awareness.



Our Environmental Impact



Policies and Management

Our target is to manage environmental impacts effectively with no harm to the communities and minimal impact on nature throughout the entire cycle of our operations from exploration and drilling through oil production to refining and marketing

We comply with all environmental standards and continuously improve our environmental management systems. KMG carries out its activities in accordance with the requirements of the Republic of Kazakhstan legislation, corporate HSE policies, Comprehensive Environmental Program.

Our commitment, objectives and priorities in the field of environmental protection are reflected in the company-wide HSE policy. According to this policy, the basic principles of the HSE management are minimization of negative effects on the environment, identification and management of environmental risks, energy efficiency and improvement of HSE transparency and visibility. These principles apply to all KMG employees and contractors.

KMG applies an integrated environmental management system that is focused on

compliance to the current environmental legislation, implementation of the principles of environmental management and the process approach. Since 2011, we have supported the quality and HSE management systems based on international standards, such as ISO 9001, ISO 14001 and OHSAS 18001.

HSE is now the number one priority on the agenda of the Board of Directors and Management Board meetings. This demonstrates commitment of our management team and increases HSE visibility.

On an annual basis, we review our environmental performance across our major operating companies, identify areas for improvements and set targets for the following years. Moreover, to avoid and mitigate the environmental effects of our business, we continuously look for opportunities to introduce new practices and technologies.

In 2015, we completed a benchmarking analysis that allowed us to compare our HSE performance with our local and international peers. Our key environmental focus areas are: greenhouse gases emissions, gas flaring, legacy waste utilization, land remediation and energy efficiency.

Energy use and energy efficiency

In recent years, the world has been experiencing a growth in energy demand. At KMG, we constantly look for opportunities to reduce energy use and become more energy efficient. Improvements in energy use will allow us to move towards a more sustainable, less energy-intensive business and a lower carbon footprint.

More than 80% of our subsidiaries and affiliated companies have implemented energy management systems in accordance with international standard ISO 50001.

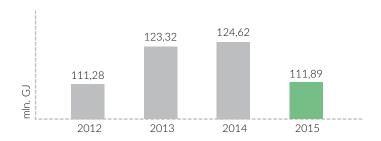
Energy management departments with assigned specialists have been assigned for data collection and implementation of actions related to improvement of energy efficiency across the company.

In 2015, in compliance with legislative requirements, we completed energy audits. These audits allowed us to baseline of our energy consumption (i.e. electricity, heat energy, natural gas, oil, fuel) and benchmark our performance to IOGP.

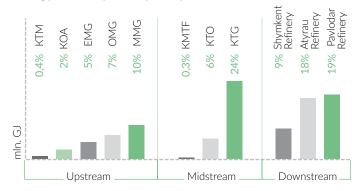
Currently, energy consumption data is provided in relation to impacts within the KMG Group, indirect energy consumption is not reflected in this report.

Energy consumption intensity for midstream companies for 2014 and 2015 remained the same at 0,1 GJ per ton of oil transported.

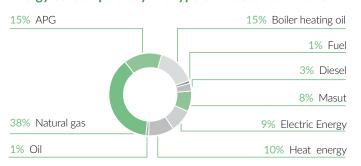
Total energy consumption from the year 2012-2015



Energy consumption by companies



Energy consumption by the type of the source in 2015





Energy consumption has been reduced by 10.2%



In 2015 we consumed 1,86 GJ of energy to produce 1 ton of oil. The increase is due to watering at KMG oilfields.



1831 employees have been trained on Energy management systems (ISO 50001).



More than 80% of our subsidiaries and affiliated companies have implemented energy management systems in accordance with international standard ISO 50001



In 2015, the average consumption in KMG refineries was 3,55 GJ per ton of oil refined, which is due to technical specification of the oil refining process and climatic conditions at the locations of the refineries.



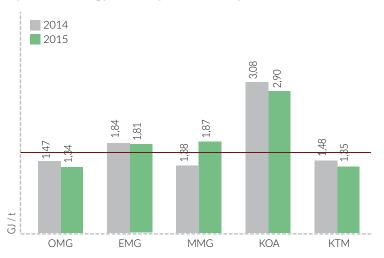
Energy saving measures

In 2015 we introduced the following energy efficiency and energy savings measures: installation of inverters and introduction of automated power factor correction units, transition to LED lightening and heating adjustments during night time, all resulting in a saving of 207 mln tenge (\$932,200).

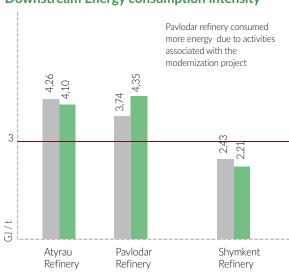
The implementation of a Group plan from 2016-2020 will reduce energy consumption on 8,098,392 GJ, saving 7,2% of energy used.

In 2016, we plan to develop a comprehensive road map on energy efficiency for the Group to achieve our goal by 2020. We are also looking to developing partnerships with potential investors in the field of energy efficiency.

Upstream Energy consumption intensity



Downstream Energy consumption intensity





Water Management

Since most of our operations are located in the Central Asian region where water is a scarce and limited natural resource, we recognize our responsibility towards the society and the environment and understand the importance of managing water use wisely.

We use water at all our operational facilities and for domestic purposes at our shift camps. Thus, the total volume of water withdrawn in 2015 equaled to 87 mln m3 (88,1 mln m3 in 2014). The major water sources are surface and groundwater reservoirs. We also use sea water that is supplied through specialized contractors for our upstream operations.

27,9 mln cubic meters of water withdrawn by KTO from Kigach River were transported to other water users in 2015 only. For the last 30 years, KTO have been supplying water to residents of arid Atyrau and Mangistau regions, oil producers and other industrial and agricultural organizations through the main water line "Astrakhan-Mangyshlak".

Water withdrawal and water consumption have a significant impact on the Ural and Kigach Rivers located in the western region of the country. These water bodies are reservoirs for fisheries and represent the habitat for sturgeon species, mammals and birds listed in the Red Book of Kazakhstan. To reduce impact on the biodiversity of river ecosystems, we implemented a series of environmental measures, including the installation of integrated fish protection facilities in the waterworks.

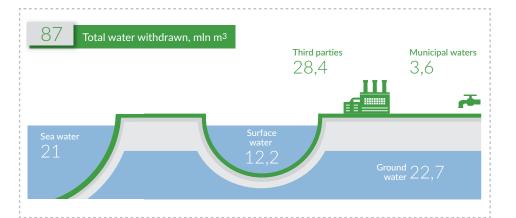
Due to the significant increase in the number of oil fields in Mangistau and Atyrau regions and the application of the secondary methods of oil extraction, we re-use produced water More than 32% of water is re-used in the refineries of KMG Refining and Marketing

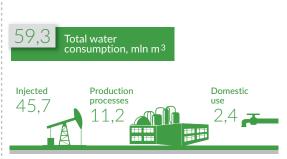
to maintain reservoir pressure. In 2015, total produced water accounted for 122 mln. m3 and 89% of it has been re-injected to the wells.

The volume of waste water by the Company following the results of 2015 amounted to 8 million m3 (8,09 mln m3 in 2014). 92% of waste water was discharged to evaporation ponds, the remaining amounts were transferred to third parties for utilization. We manage industrial and domestic waste water by treating it at specialized treatment facilities. A two-staged process of mechanical and biological treatments allows us to achieve the quality of wastewater discharges as per the requirements of environmental legislation.

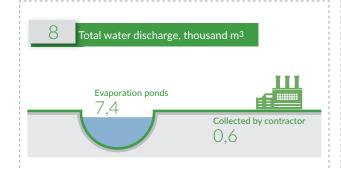
Pavlodar Refinery modernization project

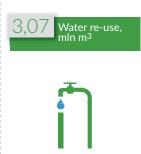
As part of the modernization of Pavlodar petrochemical plant in 2015 - 2017, we are planning to implement a series of activities such as construction of an acidic waste water treatment unit, cooling water systems unit, and a reconstruction of the main production equipment. We expect to reduce the amount of oil concentration in the waste water by 30-40%. We also aim to reduce the rate of consumption of fresh water by increasing the rate of reused treated water in the process.













Air quality management

We recognize the impact of our activities on the atmosphere and the environment and our role in the national and global climate. change agenda. Therefore, we focus on the development of air emissions control strategies and on introduction of innovative technologies and projects to comply with all national and international environmental requirements for air emissions.

Climate change

Kazakhstan intends to contribute to the international efforts of tackling global climate

In September 2015, the UN adopted 17 global goals for sustainable development with climate change being one of them. These goals coincide with the priorities and objectives of Kazakhstan and of our company.

We also support the direction provided by the Paris Agreement adopted in December 2015 Kazakhstan's submitted INDC states an unconditional target of 15% reduction in GHG emissions by 2030 compared to the base year of 1990 and a conditional target of a 25% reduction

We share the concern of the international community and therefore, take actions to control and regulate our GHG emissions according to the approved methodologies. Our day-to-day work is focused on air quality control through the reduction of direct emissions into atmosphere, air pollution monitoring and control and implementation of the methane leaks detection program.

SUSTAINABLE GOALS

























4 LIFE BELOW WATER









Representatives of state authorities and members of GHG emissions trading system organizations are invited. The working froup oversees issues and solutions, discusses best international practicies on GHG trading systems and prepares recommendations for legislation improvements.

In 2015, we created a GHG management working group that involves representatives from different subsidiaries

Climatic changes in the catchment area of the Caspian Sea basin have led to sea level change and flooding of extensive coastal areas, submerging several abandoned wells in the Mangistau and Atyrau regions. We recognize the risk of pressure loss (loss of containment) and following risk of pollution and environmental damage.

Therefore, as part of our environmental control program, we have been monitoring the conditions of our wells on onshore operations near the Caspian Sea regions exposed to flooding. According to the last results of the assessment, all previously flooded and waterlogged wells in Atyrau were drained due to dropped sea levels. Therefore, we have taken actions to completely seal all wells at risk by 2020. In Mangistau, on the other hand, all the activities on sealing have been completed in 2013.

In addition, there are regulatory risks associated with the changes in the legislative framework of greenhouse gas emissions. The greenhouse gas emissions trading system was introduced in Kazakhstan in 2013. However, the system is still under improvement.

Third party opinion



The USAID Kazakhstan Climate Change Mitigation Program (KCCMP) is working to help the Republic of Kazakhstan achieve low emissions development by growing its economy while its GHG emissions decrease for the long-term.

KMG, Kazakhstan's largest national oil & gas company, has been an active participant in USAID initiatives since 2015, including trainings and discussions on improving national GHG regulations, updating the emissions trading system and introducing production-based benchmarks for GHG allocations. KMG has also participated in the Climate Leadership Forum (CLF) since its launch in September 2014, which aimed to strengthen the technical and leadership skills of business leaders on climate change policy and science. GHG mitigation strategies and organizational management techniques. Through the CLF's practical workshops and discussions. KMG has developed new partnerships, leading to the successful implementation of methane detection pilot project in their subsidiaries.

We were also pleased to support KMG in developing its first Corporate Climate Action Plan for 2016-2020, which incorporates many of our suggestions for GHG management. We look forward to a continued collaboration as KMG develops an automated GHG emissions inventory system.

We look forward to continuing our partnership and working together to achieve a Green Economy and sustainable energy future.

Alexei Sankovski Chief of Party USAID Kazakhstan Climate Change Mitigation Program The current gaps in the legislative regulation and frequent changes in regulations create financial risks for the company by imposing penalties or necessity to purchase additional allocations for greenhouse gas emissions.

To minimize this risk, members of the working groups of the Ministry of Energy, are actively involved in improving the normative legal base of Kazakhstan. In cooperation with the USAID Kazakhstan program for control of climate changes, we have broadened our knowledge and enhanced our capabilities in the implementation of emissions reduction policy.

Greenhouse gases and ozone-depleting substances

The current RoK legislation sets quotas for $\rm CO_2$ emissions and requires us to monitor direct emissions. Information disclosed in this section on direct GHG emissions is based on verified results of actual inventories. Information is disclosed for the companies included in the National Plan for Allocation of quotas for 2015. Based on the approved state methodology, we calculate our actual emissions.

The National Allocation Plan includes the 13 largest subsidiaries and affiliates of the Group with a total volume allowance of 6.77 million tons of CO₂. During the year, due to the introduction of new sources of emissions, several subsidiaries and affiliates of KMG obtained additional quotas from the State totaling 0,44mln.tons of CO₂ yielding a total quota allocation in 2015 of 7.1 mln tons of CO₂, the actual amount of CO₂ emissions amounted to 5.75 mln tons (5,84 mln. tons in 2014). Despite the increase in production across the company, there has been an overall reduction of CO₂ emissions. Two upstream companies exceeded their allocated quotas and purchased credits in the KASE Stock Exchange to offset the excess.

Upstream and Downstream companies are the largest emitters of ${\rm CO}_2$ and account for 46% and 44% of total emissions respectively.

Due to effective GHG management actions, most subsidiaries and affiliated companies remained under allowed limits of CO_2 emissions quotas. Measures such as changes in operational practices of gas transportation, pipelines maintenance and reequipping of 242 vehicles with natural gas conversion kits resulted in significant reduction in CO_2 emissions.

As of December 2015, the Government took a decision to suspend the greenhouse gas emission trading system from 2016 until January 2018 in order to develop a more robust and transparent system. The requirement for the annual inventory and verification statements will remain valid and we will continue

to monitor and control our CO_2 emissions and take required actions towards GHG emissions reduction.

Greenhouse gases emissions intensity

Energy efficiency action taken in Upstream companies from 2012 – 2014, resulted in reduction of CO₂ emissions intensity. In 2015, however, a slight increase occurred with the introduction of a gas turbine electric power plant and a new gas compressor at KTM and MMG.

Over the past two years we experienced a slight increase in the intensity of the CO_2 emissions in Downstream from 2013 to 2015, directly related to the increase in the depth of oil refining process and modernization works.

Reductions of emissions in Midstream are due to reduction in volumes of oil transported.

Greenhouse gases emissions



Case study

KazMunayTeniz

Due to legislative limitations on GHG regulations, in 2014-2015, there was no mechanism for allocating the quotas for installations with ${\rm CO_2}$ emission levels close to the established threshold of 20,000 tons of ${\rm CO_2}$. Those entities were not included into the GHG National Allocation Plan since the plan was formed on the basis of historical emissions from previous years. Therefore, some companies could not receive a certificate for GHG emissions. Current legislation does not allow companies to operate in case of the absence of the certificate.

KazMunayTeniz (KMT) is an example of how GHG emissions inventory results showed that the actual emissions of carbon dioxide exceeded the permissible threshold at one of their fields. This resulted in a complaint from Mangistau Environmental Department for operating without quota certificate/quota for GHG emissions, which resulted insuspension of the company's activities.

Following negotiations with state authorities, the request of KMT's inclusion into the National Plan of 2014-2015 was rejected due to absence of legal norms that regulate such cases. KMT had to cover all their annual GHG emissions by buying quotas from the Stock Exchange.

KazMunayTeniz has since been included in the National Plan for 2016-2020 only.



Methane detection pilot project

In 2015, 2 upstream companies launched pilot projects for the detection and measurement of methane leaks at industrial facilities. These projects are funded by the Government of Norway and carried out under the Methane Abatement Program which was launched under a broader Norwegian plan to support Kazakhstan in GHG mitigation efforts. The investment carried out on certain production facilities made it possible to detect and quantify the leakage of CH4 from various emission sources.

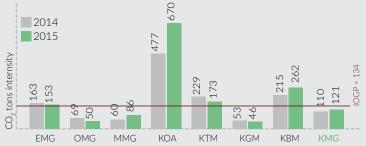
Prevention of the methane leakage are not only environmentally beneficial, but also cost-effective.

In 2016 we plan to continue the implementation of the methane project in other facilities for detection and measurements of methane leaks

Intensity of CO₂ emissions in upstream



Intensity of CO₂ emissions in Group upstream companies



Overall KMG CO₂ emissions intensity for 2015 amounted to 121 tons of CO₂ per thousand ton of production

CO₂ emissions intensity in downstream



CO₂ emissions intensity in midstream



Third party opinion



WORLD BANK IN KAZAKHSTAN

An International Initiative on reducing the volume of associated petroleum gas flaring "Zero Routine Flaring by 2030".

On behalf of the World Bank, we express our deep gratitude to JSC NC «KazMunayGas» for approval of the "Zero Routine Flaring by 2030" Initiative.

We would also like to thank KMG for the ongoing efforts to reduce the volume of APG flaring. Successful implementation of the plans for the effective utilization of APG flared, and a noticeable reduction in flaring volumes illustrates the strong commitment of your company to environmental protection and efficient management of resources.

We appreciate the fact that, according to long-term development strategy of KMG, the regular APG flaring should not be used, and the best available technologies for energy efficient and environmentally safe disposal of gas should apply.

We look forward to the successful implementation of the initiative by KMG in 2030.

Rakhimzhan Asangaziyev Acting representative of the World Bank in Kazakhstan

Pollutant emissions

Besides greenhouse gases, sulfur oxides (SOx) and nitrogen oxides (NOx) are other major emissions released into the atmosphere. They are the result of combustion processes in oil refining and exploration and production activities.

Calculations of emissions are based on the technical characteristics of the equipment and made according to state guidelines and recommendations. Despite the actions taken to mitigate the environmental impacts, the emissions of pollutants in 2015 compared to the 2014 period, increased by 46,860 tons or 10%, a result of increases in production and introduction of additional emissions sources stated earlier. The main contributors are upstream and downstream companies.

Associated gas utilization

According to the laws of the Republic of Kazakhstan, flaring of associated gas is permitted only if state authorized and operations are conducted in line with project documentation, and norms and volumes are kept within the permissible limits.

We support the World Bank Initiative "Zero routine flaring by 2030" to reduce global gas flaring. The initiative brings together governments, oil companies, and development institutions that agreed to cooperate to stop gas flaring before 2030. The initiative is related to the routine gas flaring only and is not extended to flaring for safety reasons.

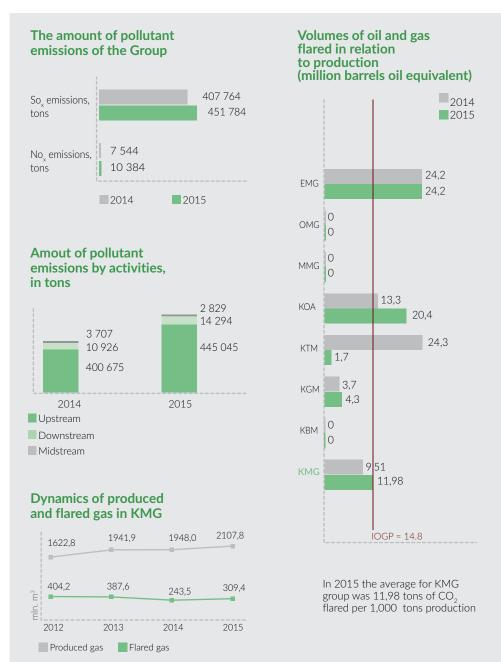
In 2015, the overall level of gas utilization by the Group amounted to 85.3% (in 2014-87.5%), the majority of subsidiaries rate is over 95%. There are 4 fields with the utilization level of 55-66% in EMG and KOA. We are taking actions to address this issue and aim to achieve 100% utilization level in the Group in the next few years.

Majority of KMG subsidiaries level of gas utilization is over 95%

For example, EMG is currently constructing a desulphurization plant for the associated gas fields of Prorva group. Implementation of this project will increase gas utilization in the Group from 85.3% to over 90%.

At KOA, the gas utilization is at 70%. A new road map for the construction of a Gas Processing Plant in «Kozhasai» has been developed and agreed. The construction will be carried out by JSC "KazTransGas" and its partners.

During the last 4 years gas production increased, however, there is a downward trend in gas flaring in 2012-2014. The increase in volume of flared gas in 2015 occurs due to the increase of natural gas production in upstream companies with low level of gas utilization.



Waste Management

Industrial waste management is one of the highest environmental priorities of the Kazakhstan authorities and local businesses. We allocate significant investment to handle waste generated at our production facilities and contaminated land. Following the Environmental Code requirements, for hazardous waste that cannot be treated and utilized at the sites, we transfer it to regional contractors that have capabilities to provide its safe disposal at specialized landfills. We ensure that contractors comply with our requirements during transportation, disposal and utilization.

We maintain a "zero waste" discharge policy into aquatic systems during offshore operations. All generated drilling waste is transported onshore for subsequent detoxification and transferred to specialized landfills.

At a subsidiary level, we ensure that required environmental monitoring and control is conducted regularly and on time. To comply with legislative requirements, each subisidiary has developed a Waste Management Program, approved by state authorities.

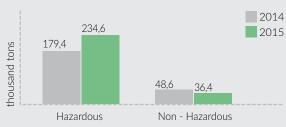
On a corporate level, we monitor, control and audit the compliance with waste management requirements.

We are also exploring new technologies and practices in the field of waste utilization. In 2015 we created a waste management working group with representatives from different subsidiaries to share experiences and best practices.

Legacy waste and contaminated land generated in the 1970s is a significant concern for our company. Court decisions appointed some landfills as the state property and KMG EP is implementing a plan of actions on this waste liquidation process in agreement with local state authorities.

The majority of waste is generated during drilling activities and oil refining activities. In 2015, the waste in upstream and downstream accounted for 36.4% and 46.6% respectively.

Volume of waste generated



This increase is a result of production growth and construction of a refining unit at the Atyrau refinery

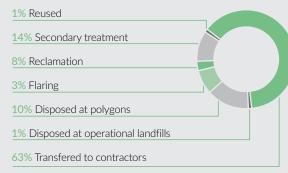
Waste utilization methods, 2014



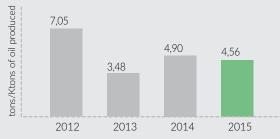
Waste generation by business units 2014, 2015



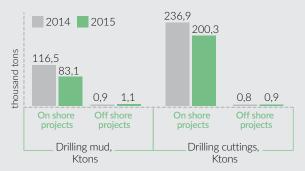
Waste utilization methods, 2015



Waste generation intensity



Volume of drilling waste generated



We do not export nor import hazardous waste internationally

Based on the results of the waste generation analysis, we will develop and implement a holistic corporate waste management plan for 2016 – 2020 that considers implementation of innovative and clean technologies and processes for effective treatment, utilization and reuse of our waste.

The key aspects of the Plan are:

- ♠ Improvement of the waste management structure
- Development and implementation of corporate documents for effective waste management
- Improvement of the culture through motivation programs, workshops and trainings
- ▲ Legacy waste utilization plans
- Introduction of innovative and green technologies
- ♠ Development and introduction of the KPIs.

For the purposes of disposal, recycling and utilization of drilling waste the following methods, were used: biological remediation, thermal cracking, thermal desorption and waste disposal at landfills.

Case study

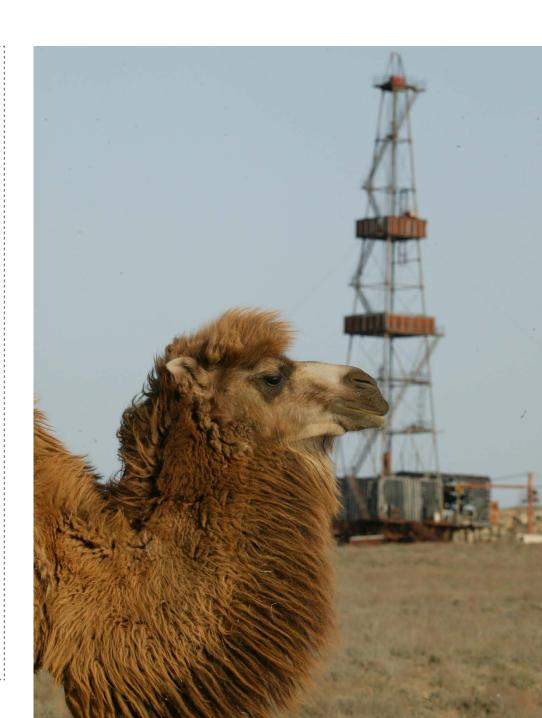
Pilot project in OzenMunayGas: BioBox technology

The pilot testing of Biobox in OMG is a good example of a successful introduction of new technology for legacy waste utilization. The project was conducted on a 3000 m2 site and conducted by our Danish partners, this technology uses a biological agent, «Bakoil-KZ», that consists of non-native microorganisms. This method demonstrated its high bioremediation potential for contaminated land with high concentrations of paraffin. As a result, the concentrations of hydrocarbons have been reduced 9,6 times over a period of 3 months.

Moreover, the technology of water reuse in the process allows us to minimize our water consumption rates for waste management. We are also able to use treated soil for road construction purposes.

Considering the historical nature of the land contamination and high concentrations of hydrocarbons (average 5-30%) in the region, we are trying to find opportunities to preliminary treat and prepare those lands for BioBox technology. We also plan to apply that technology on a larger scale once we analyze its cost effectiveness.

In 2015, we generated drilling waste of 355,2 thousand tons. (201,3 thousand tons of drill cuttings and 84,2 thousand tons of waste drilling mud). Comparing to 2014, the amount of drilling waste generated decreased by to 69,8 Ktons or 19.6 % in 2015. This is explained by reductions in both onshore and offshore drilling operations.





Impact on biodiversity

As a Group of companies with extensive operations in the oil & gas industry, we understand the importance of biodiversity protection and preservation.

For all our projects, we identify and evaluate environmental, social and health risks and look for opportunities for improvements through the **Environmental Impact Assessment** process. Additionally, biodiversity and ecosystem services are taken into account during the industrial monitoring processes throughout the whole production cycle.

Location of production units in relation to natural reserves

Urikhtau

Urikhtau is located in the Mugaljar district of Aktobe region, 215 km from Aktobe. The North-western part of the field is located on the national nature reserve Kokzhide-Kumzhargan. where exploration activities are carried out

Field development is a social project under control of the Republic of Kazakhstan, designed to provide natural gas to the southern regions of the Republic of Kazakhstan, and is a major element in the construction of the main gas pipeline «Beineu-Bozoi-Shymkent».

KazakhOil Aktobe LLP

Alibekmola and Kozhasai are located in the Mugalzharsky

district of Aktobe region, 350 km from the city of Aktobe. The territory of the field is located near the National Nature Reserve «Kokzhide-Kumzhargan».

Kansu

The site is located on the territory of Kansu Karakiva district of Mangistau region.

The contract area is partially located within Kendirli Kayasanskoyprotected area and buffer zone of the Ustyurt state reserve.

We conduct exploration projects in the Kazakh sector of the Caspian Sea which has special environmental requirements. Most projects are operated in partnership with foreign companies and include: Khvalynskoe, Central, Pearls, Zhambyl, N project Satpayev.

Zhambyl

The site «Zhambyl» is located in the northern part of the Kazakhstan sector of the Caspian Sea within the North Caspian uplift (Isatay District Atyrau Region). The sea depth in the area of operations ranges from 2.5 to 7 meters. This sector of the Caspian Sea is a Government protected zone. The north-western part of the Sea, where most activities are carried out, is a highly environmental sensitive area of the state conservation area and is subject to a number of restrictions in terms of offshore oil operations. Part of the land area is located in Novinsky reserve.



Location and size of KMG's operations in relation to areas of high biodiversity value

Operation	Location	Key biodiversity area (kba)	Position relative to key biodiversity areas	Size of operational site (km2)	Ecological sensitivity	Mitigation plan
Kansu	Karakiya district of Mangistau region	Kendirli Kayasanskoy-protected area and buffer zone of Ustyurt state reserve.	Partially	4374,6	Habitat for IUCN listed species	Frequent biological monitoring assessments;
Urikhtau	Mugaljar district of Aktobe region	Sands Kokzhide Groundwater Kokzhide	Partially	239,9	geological and hydrogeological area of the state natural reserve fund	Hydrogeological monitoring
Alibekmola and Kozhasai	Mugaljar district of Aktobe region	Sands Kokzhide Groundwater Kokzhide	Relatively close	156,5	geological and hydrogeological area of the state natural reserve fund	Hydrogeological monitoring
Zhambyl	Isatay District Atyrau Region	especially environmentally sensitive area Novinsky reserve	Partially	1 935,2	Habitat for sturgeon Caspian seals	Frequent biological monitoring assessments restrictions in terms of offshore oil operations

Protected areas

Ustyurt Nature Reserve:

Ustyurt State Nature Reserve is included in the list of subsoil areas of special ecological, scientific and cultural value assigned to the category of specially protected natural areas of national significance. Moreover. «Spring Kendirli» is included in the list of hydrogeological objects of the state nature reserve fund of national and international importance. Ustyurt Reserve includes unique geological, paleontological and archaeological sites and is a key habitat for a number of species listed in the National Red Book (gazelle, urial, caracal, saker falcon, golden eagle, eagle owl, jack and so on). In addition, this area is planned to obtain the status of World Natural Heritage (OVPN) UNESCO. In accordance with the environmental legislation of the Republic of Kazakhstan, any industrial activity is prohibited in the region.

Kenderli Kayasanskaya-state reserve zone

Kenderli Kayasanskaya-state reserve zone is located in the vicinity to the Ustyurt Nature Reserve and is permitted for geological studies and exploration of mineral resources when special environmental requirements established by the Environmental Code of the Republic of Kazakhstan are respected.

State natural reserve zone "Kokzhide-Kumzhargan"

The reserve «Kokzhide-Kumzhargan» include 2 regions of Republican significance:

Sands Kokzhide - geological area of national significance, which has a special ecological and scientific value. Sands is a unique reservoir of groundwater.

Groundwater Kokzhide field - hydrogeological area that also has special ecological and scientific value, is the largest in the Western

Kazakhstan and is valued for the quality of drinking water from groundwater reservoirs.

North Caspian reserve zone

Northern Caspian is unique in terms of biological and commercial value of fish fauna, especially species of sturgeon. North and Middle Caspian is one of the most valuable areas and nodal points through which millions of waterfowl migrate annually and seals are breeding. In the late 1970s the North Caspian reservation zone was established for the conservation and reproduction of fish stock.

Novinsky state reserve area (45 thousands hectar) was founded in 1967 on the eponymous island, and water areas for the protection of wetlands located in the eastern part of the Volga delta on the border between Kazakhstan and Russia. There are protected rare species of plants such as water chestnut, sacred lotus, Sandman Astrakhan, white water lily, as well as

representatives of the animal world: muskrat, beaver, Brandt's Hedgehog, 27 species of birds (pink and the Dalmatian pelican, flamingo, whooper swan, small white heron, yellow heron, spoonbill and ferruginous duck). Currently, the territory of the reserve is almost completely under water due to rising sea levels.

Impact on biodiversity is a result of exploration activities from: noise, vibration, transport and transformation causing removal of relief areas of potential habitat of animals.

In order to minimize impact on biodiversity environmental monitoring is carried out and necessary programs are undertaken and approved by authorized bodies in the field of environmental protection.

Our Environmental Impact

Conservation of biodiversity

In 2015, in Laktybay and South Karatyube fields, a project of land reclamation was implemented (land affected by construction of power lines) and successful recovery was confirmed by the state authorities.

In 2015, we completed restoration works on 17 abandoned wells in Kansu field (legacy wells from 1970s) and surrounded lands.

In 2016, we plan to complete environmental audits to identify and assess current and potential risks in Kansu. Considering the vulnerability and uniqueness of Kendirli-Kayasan protection zone and Ustyurt state reserve, we will develop comprehensive action plans to avoid and mitigate any

environmental damage once the audit is completed.

During offshore operations in the northern part of Caspian Sea, we follow several principles:

- Principle of "zero waste and discharge" when all waste and water are transported to the land;
- All vessels are equipped with fish protection devices and there is no bilge water release;
- All operations are prohibited during spawning periods (April 1st – July 15th)
- Fishing is not allowed;
- No hydrocarbons flaring during the night;

All drilling rigs are also supplied with vessels for Tier 1, Tier 2 oil spill responses and have contracts with OSRL for Tier 3 oil spills.

In case of imminent harm to aquatic species, we will stock the ecosystems with juvenile sturgeon as a compensatory measure.

Overall, 4,300 of hectares were cultivated in 2015 and 164,000 hectares in 2014



Third party opinion-----

Oil Spill Preparedness Regional Initiative (OSPRI) is an IPIECA-administered group that encourages and supports industry and governments working cooperatively, promoting the adoption of proven, credible, integrated and sustainable national, regional and international oil spill response capability. Major investors in the Caspian and Black Sea regions such as BP, Chevron, Eni, ExxonMobil, Inpex, Shell and Total work jointly through OSPRI.

Whilst not a member of OSPRI, KMG Systems & Services and KMG Research & Development Institute of Drilling and Production has contributed to the development of Kazakhstan's national oil spill preparedness framework, including studies into the effectiveness of oil spill response methods. These companies have worked closely with OSPRI, helping to align the national framework to international good practice. This has promoted tiered preparedness and response, a risk-based approach, choosing response options that minimise environmental impacts, and ensuring the availability of the range of oil spill response instruments. Through workshops and conferences KMG has been acquainted with current practices, including those captured within the recent and comprehensive publications produced under the IOGP-IPIECA Oil Spill Response Joint Industry Project.

OSPRI believes that KMG has a potential to be among the leading companies in the field of accepting proven reliable industry good practices and encourage them to join to OSPRI in the near future.

Oil Spill Preparedness Regional Initiative (Caspian Sea – Black Sea – Central Eurasia)

Oil spill preparedness and prevention

Constant readiness for oil spill response (OSR) is an absolute priority for KMG

Operation sites have plans in place for oil spill response. To strengthen our preparedness the company regularly conducts theoretical and practical lessons, drills and exercises at different levels to improve the skills of personnel.

Onshore operations

Total number of oil spills at Upstream facilities amounted to 3 significant cases in 2015 (same as in 2014) with total volume of 23,74 tons. We ensure the environmental restoration of contaminated areas, and there were no significant fines or penalties from state authorities registered during the year.

According to the organizational guidelines of the Ministry of Energy on formation of civil protection, KMG participated in the republican command-staff exercises and other activities carried out by the executive bodies in terms of prevention of emergency situations.

> KMG subsidiaries conducted fire drills, various training sessions and exercises aimed at eliminating possible process safety events

Offshore operations

The majority of offshore oil spill response exercises were implemented during exploratory drilling operations of a well at Satpayev block.

In order to ensure Tier 1, 2 and 3 oil spill preparedness and response to blowouts and

readiness for disaster rescue operations, Satpayev Operating signed a Participation Agreement with Caspian Sea Support, KMG Systems & Services and Atyrau department Ak Beren, a Center of Paramilitary Professional Emergency services.

Tier 1 & 2 oil spills response trainings demonstrated that Satpayev Operating has adequate materials, resource base, well qualified staff and experience for provision of timely response and liquidation of this classification of spills.

Our oil spill response capability and environmental protection during operations in Kazakhstani region of the Caspian Sea is ensured by North Caspian Oil Spill response base (NCOS).

The major purposes of NCOS base are to:

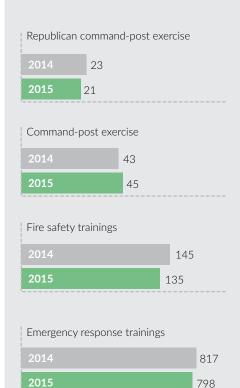
- Respond to any oil spill in the Northern part of the Caspian Sea, in particular, during operations in the Kashagan block;
- Treat and rehabilitate aquatic and land species affected by oil spills;
- ♠ Train personnel on equipment usage and application in case of oil spills;
- Provide services on environmental and meteorological monitoring.



Total volume of oil spills



Number of trainings on fire and process safety





Payments for environmental impact & protection

In 2015, total expenses for environmental protection amounted to 9,016 mln tenge (\$40,1 mln)

Costs associated with waste management, emissions and water management, prevention and liquidation measures were 7,661 mln tenge (\$34,6 mln) and expenses for environmental management were 1,355 mln tenge (\$6,1 mln).

The fees paid for environmental violations amount to 2,5 bn tenge (\$11 mln) in 2015. These penalties include charges for excess emissions, excessive emissions of polluting substances and unauthorized waste.

In 2014, 2,9 bn tenge (\$13 mln) was paid for environmental fines. In the field of waste management, the fines decreased from 354,3 mln tenge (\$1,6 mln) in 2014 to 96,4 tenge (\$434K) in 2015, a result of the implementation of waste management action plans in each subsidary. Also, fines for excessive emissions of pollutants have decreased by 50% from 45,4 mln tenge (\$204K) to 22,9 mln tenge (\$103K).





Payments	20	14	2015		
Payments	mln KZT	mln USD	mln KZT	mln USD	
Waste and emissions management	10 996,7	49,6	7 661,7	34,6	
Waste utilization and disposal	4 793,3	21,6	1 858,1	8,4	
Water discharges and GHG treatment	2 304,9	10,4	2 515,1	11,3	
Expenses for licenses and permits	150,8	0,7	79,9	0,4	
Maintenance of the equipment, materials and services necessary for operations, personnel costs associated with the relevant activities	2 430,7	11,0	2 942,9	13,3	
Environmental insurance	238,0	1,1	238,0	1,0	
Costs associated with prevention and liquidation of environmental damage	1 079,1	4,9	27,8	0,1	
Investments on environmental protection prevention measures	1 303,4	5,9	1 354,6	6,1	
Trainings	21,7	0,1	9,7	0,04	
Environmental Management Systems Consultant services	15,1	0,1	11,2	0,1	
Certification	24,9	0,1	38,8	0,2	
Personnel	5,3	0,02	4,3	0,02	
Research and innovations	351,5	1,6	376,1	1,7	
"Green" technologies introduction and implementation	4,2	0,02	6,5	0,03	
Other expenses related to "green" technologies	7,6	0,03	5,1	0,02	
Other expenses	873,0	3,9	903,0	4,1	



We recognize the importance of regional and community development, therefore we fully engage with stakeholders while simultaneously running assessment programs to measure the impact of our operations and on the environment and health of local communities.

Community Engagement

In order to assist the regional development we actively collaborate with local authorities through Memorandums and provide access to necessary goods & services in underdeveloped areas.

In all regions of our activities Health, Safety and Environment Commissions collaborate with local labor unions to ensure the labor protection requirements, prevention of industrial accidents and occupational diseases and inspecting the safety of work places.

Prior to launching new projects and facilities we implement a complex plan of actions in the framework of environmental impact assessment (EIA), which is aimed at informing the society on planned activities in order to get their feedback. We ensure access of all stakeholders to EIAs, suggestions and comments. The EIA and other related materials are posted on local authorities' websites and in mass-media.

For example, we engaged with more than 1600 citizens in Almaty living near the gas pipeline "Kazakhstan-China", where more than 70 public community meetings were held to explain our approach, legislation norms and how we comply with them and answer their questions.

There are official mechanisms of submitting complaints such as written and electronic messages addressed to the Organization's Clerical Office, hot lines for automated receipt of phone and text messages.

Sponsorship and Charity

Sponsorship and Charity at KMG is provided by the Company for the maintenance and development of social, cultural and humanitarian spheres of society.

Charitable contributions by KMG are based on the principles of legality with the Constitution of the RoK, equality, voluntary participation and transparency.

Our Policy on Charity and Sponsorship sets our main priorities:

- social support for disadvantaged groups;
- development of educational and health systems:
- assistance to victims of natural disasters;
- to develop cultural communities, support human development and regionally significant events:
- strengthen labor relations, international relations, investment in SD of society;
- support of regional & business initiatives; promotion of the country in the world arena of professional sports as well as maintaining and strengthening the Fund's and Company's reputation.

The main areas for the charitable support were: organizations of veterans, people with restricted abilities, orphanages, children centers and other non-profit social organizations. We provided social support to veterans of the oil and gas sector, along with financial assistance for sponsoring the events related to the 70th anniversary of WWII Victory. Parts of the funds were dedicated to the treatment of children, and to help children with disabilities and from low-income families. We also organize holidays for children of our employees on an annual basis.

Our communities



Moreover, according to collective agreement, in 2015 resources were allocated to improve the social conditions of the former workers of the Pavlodar Refinery. KMG supported a number of social development projects, such as the connection to gas pipelines in settlements of Almaty region and the program of Astana development.

In 2015, the focus of our sponsorship was the support of sports in Kazakhstan, such as: the Confederation of combat sports and power sports, tennis federation and CF «Presidential professional sports club» Astana, and the Professional boxing club «Astana Arlans». We believe that developing sports of Kazakhstan will promote healthier and more rewarding lifestyles. Also given the international and national importance of Eurasian Forums organized by our key stakeholder "KazEnergy", we co-sponsored the 10th Eurasian Forum. We actively and constantly sponsor cultural events, such as commemorating the 550th anniversary of the Kazakh Khanate in 2015.

- In Kyzylorda region, under the provisions of a Memorandum of understanding signed at local level, KazGerMunay JV LLP sells natural gas at a reduced price to the inhabitants of the region.
- ♦ KOA concluded a Memorandum of Understanding with the mayor of Aktubinsk region, with provisions on production processes and labor rights for employees.
- MMG financed a social project of community significance called "Contribution to Mangistau development: achieving better results through accountability and direct foreign investments"



Our female employees are members of the Association of Business Women of Kazakhstan



KMG subscribes to principal provisions of the precautionary principle (Principle 15 of the Rio Declaration on Environment and Development of the UN, 1992)



In 2015, 29 public hearings were held.

We are always open to dialogue



In 2015 KMG rendered charitable and sponsorship support in all priority areas in the amount of 6.8 bin tenge (\$23mln)





Market Presence



In accordance with the state program for industrial and innovative development of Kazakhstan, three refineries are undergoing modernization and reconstruction.

Modernization of refineries will reduce negative impacts on the environment and improve the quality of petroleum products to the technical requirements of the Customs Union to the environmental class of K4, K5 and to increase the capacity of the secondary processes and oil refining enrichment.

As a national operator of petroleum and oil products, we offer shipment of socially important petroleum products at a reduced cost. Every year KMG RM provides diesel fuel to farmers during the sowing and harvesting season at a reduced price. In 2015, 120,000 tons of diesel fuel and 24,000 tons of fuel oil were shipped. During the winter season, we supply oil for social and industrial facilities of Kazakhstan.

KMG RM distributes a wide range of petroleum products, both for export and for the domestic market through their channel of gas stations under the brand «KazMunayGas», located in all regions of Kazakhstan.

A program of retail network expansion is being carried out both through the construction of new gas stations, and purchasing and retrofitting existing facilities. During the construction of gas stations, KMG complies with all safety requirements, applies the best international practices, sets modular construction, uses the latest fuel dispensers and advanced software.

Throughout the reporting year, there were no records of incidents of noncompliance with regulations and voluntary codes concerning the impact of products and services, health and safety, or service information and labeling of product properties.

In November 2015, our gas stations were recognized as best in the "Choice of the Year in Kazakhstan"

Product marketing and labeling

The fuel we produced meets the requirements of technical regulations of the Customs Union 013/2011 "About requirements to automobile and aviation gasoline, diesel and marine fuel, jet fuel and heating oil"; and the requirements of GOST, national standards and technical specifications.

Before the release of fuel into circulation/consumption, an appropriate fuel acknowledgment is carried out and a declaration of conformity is issued. Each batch of fuel put into circulation is accompanied by a quality document (passport). Information about the name, brand fuel dispensers of gasoline and diesel fuel is available at petrol stations and reflected in the cash receipts. In addition, at each gas station there is a "Customer point", where all information is available for review – quality passports and company declaration for each type of fuel sold.

To ensure the quality of the fuel, we continuously monitor the entire supply chain of petroleum products from refinery oil depots to gas stations. The process of oil products quality control is governed by the "Regulations on the Control and securing the quality of petroleum products", documents of accredited laboratories management systems and is conducted by a special quality control department. Laboratories carrying out quality control in KMG facilities are accredited by the



state accreditation system of the RoK and are included in the registers of Testing Laboratories of the Customs Union and international laboratories, which are part of International Laboratory Accreditation Cooperation (ILAC). In addition, control is carried out by express

analysis laboratories allowing monitoring of fuel quality at all sites in Kazakhstan.

Dispatcher Center of KMG-Onymdery conducts its own marketing analysis of the current situation in the domestic market



of Kazakhstan based on the data of foreign markets and on the basis of the information and analytical agencies such as International Analytical Center of Oil and Gas, Thomson Reuters and Argus. In 2015, there were no cases of noncompliance with regulations and voluntary codes concerning marketing communications, including advertising. KMG does not sell banned or disputed products. Moreover no substantiated complaints regarding breaches of customer privacy and losses of customer data were registered in 2015.





Working with clients

One of the most crucial aspects of our work is constant improvements of the quality of our oil by-products and other offered services for clients' satisfaction, We have a 24-hour call-center responsible for responding to customer complaints and recommendations, and transfer of information to the Customer Service Center for further consideration and necessary action.

Additionally, rules for assessing customer satisfaction level were developed for the purpose of standardizing the process of gathering, monitoring and analysis of information, which is related to perception of customer's satisfaction. Consolidation and distribution of this information is done to

- create and sustain a long-term relationship with the customer;
- forecast customers' demands and needs;
- identify areas for future improvement in customer service;
- correct plans, goals, processes and concrete actions which are customer service quality increase oriented.

In order to identify the level of customer satisfaction we use the following tools:

- ♠ Touchscreens at gas stations for the whole period of service provision;
- CRM-sensor sales center– for the whole period of service provision;
- Paper based surveys twice a year;
- Official customers complaints or comments
 processed as soon as received;
- ♠ Call-center & official Company's website processed as soon as received;
- Complaints and comments book processed as soon as received.

In the case of customer complaints about the quality of petroleum products we conduct an analysis of oil samples, where consumers are always encouraged to participate in sampling of petroleum products. Independent assessments by third-party testing laboratories are also conducted when required and test reports of accredited laboratory are communicated to the consumer.





Procurement practices

KMG's activity in purchasing goods, works and services is carried out within the Regulations of the Samruk-Kazyna Fund. Tendering is performed by electronic means for publicity and transparency of the procurement process, purchasing of qualified goods, works and services, fair competition among the potential suppliers. Suppliers who fail to comply with security and other regulations are identified through a "Blacklist" of potential or current suppliers of the Holding and (or) the Blacklist of bidders for government contracts.

KMG is committed to actively supporting the Government of the Republic of Kazakhstan to increase the share of local content in goods. works and services, and also to develop local qualified technical and managerial personnel. We plan to achieve these indicators by:

- ♠ Increasing the share of local content in procurement of goods, works and services;
- Establishing long-term contractual relationships with Kazakhstan suppliers of goods, works and services:
- Formation and active usage of information exchange mechanism with the local suppliers of goods, works and services for longterm needs of the oil and gas industry and requirements for the specifications of goods, works and services to be purchased;
- Cooperation with international partners to transfer technologies and create equipment and component manufacturing in Kazakhstan.

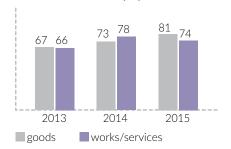
Despite the significant decline in the world oil prices, which caused budget reductions and investment programs reductions, KMG acknowledges its duties to support domestic commodity producers and to participate in the industrialization of the country.

In 2015, the total volume of KMG Group procurement amounted to 1,67 bln tenge with the local content share at 77%: products at 81%, works and services at 74%

One examples was the creation of a joint venture between KMG and "Nabors Drilling International Ltd" - an American world leader in oil and gas drilling, a partnership aimed to: increase local content, implement best practices, technologies and management system of "Nabors", transfer know-how and to work effectively in the long term on the major oil and gas projects in Kazakhstan as a drilling contractor.

The new JV "KMG Nabors Drilling Company" LLP has been operating at Tengiz oilfield since October 2015.

Local content share in the total procurement volume of KMG (%)





1677 long-term agreements with the domestic suppliers of goods, works and services amounted to 1.17 bln tenge remain in force



KMG management visited to the 13 regions of the country, during which 158 memorandums with the local authorities and city halls and domestic Kazakh suppliers and producers for the total amount of 365 bln tenge were signed



In 2015, 1,155 agreements in the amount of 392 bln tenge were signed



Our Economic Input



Key production indicators*

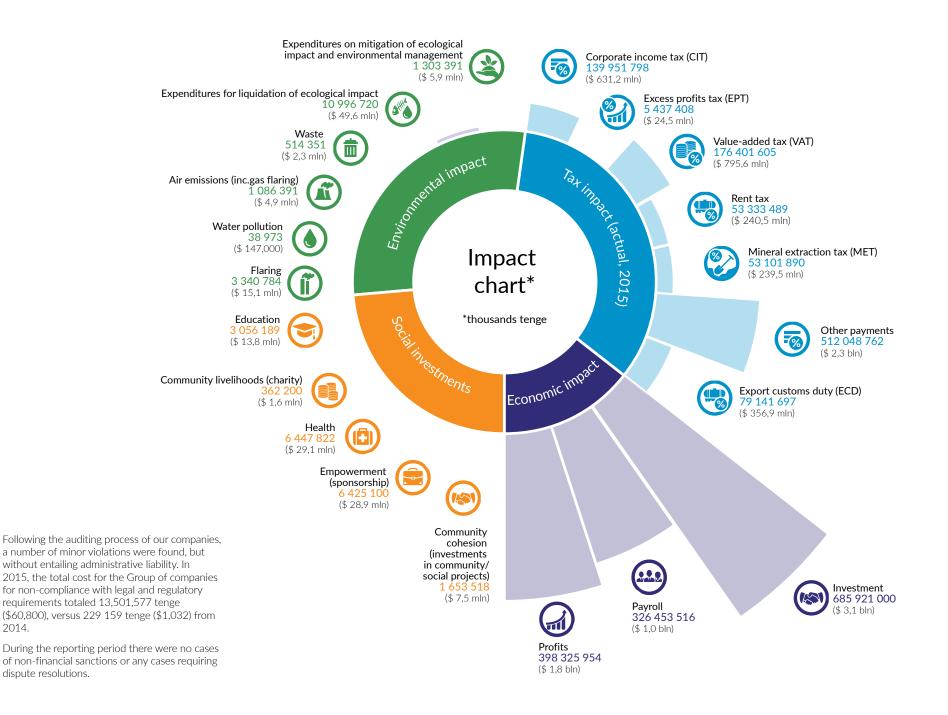
Indicator	metrics	2014	2015
Oil production	K tons	22 490	22 670
Gas production (natural)	mln.м³	4 814	4 844
Hydrocarbons refining	K tons	17 116	16 317
Oil transportation by trunk oil pipelines	K tons	64 005	61 001
Oil cargo turnover	mln.tons km	44 206	45 447
Marine oil transportation	K tons	9 606	7 033
Gas transportation by main gas pipelines	mln.м³	105 445	102 750
Commodity transport operations for gas transportation	bln.m³ km	45 381	40 339

^{*}Includes data on KMG subsidiaries and JVs

Key financial indicators (mln tenge)

	2015	2014	2013	2012	2011	2010	2015 / 2014, %
Income, total including:	2 215 626	3 541 713	3 405 049	3 101 218	2 787 707	2 252 197	- 37
Income from sales of goods and rendering services	1 094 699	3 186 764	3 252 719	2 960 418	2 625 256	2 098 942	- 66
Costs, total including:	2 272 402	3 650 072	3 206 860	2 982 379	2 689 116	2 065 663	- 38
Cost price of sold products and rendered services	1 093 791	2 322 162	2 354 109	2 090 818	1 836 061	1 409 001	- 53
Corporate income tax expenses (inc. EPT)	232 149	117 101	193 396	177 131	153 147	132 675	98
Income / (loss) from discontinued operations*	607 802	(-) 3 102	331	628	9	-	-20981
Net income after minority interest	398 326	207 363	440 955	369 420	422 422	305 309	92

^{*}A significant deviation of the data for 2015 is due to the fact that in 2015, revenues and expenses KMG-International were reclassified in income / (loss) from discontinued operations



Abbreviations

ANS	"Aktaunefteservice" LLC	IAOT	International Association of Oil Transporters	KMT	JSC "MNC "KazMunayTeniz"	OSC	"Oil Construction Company" LLC
BoD	Board of Director	ICA	JSC "IntergasCentralAsia"	KMTF	«National Maritime Shipping Company «Kazmortransflot»LLP	OSPRI	Oil Spill Preparedness Regional Initiative
EBD ISM	Electronic base of documents of integrated systems management	ILAC	International Laboratory Accreditation Cooperation	KOA	"Kazakhoil Aktobe" LLP	OSR	Oil spills response
EIA	Environmental Impact Assessment	INDC	Intended nationally determined	KPI	Key performance indicator	OSRL	Oil Spill Response Limited
EMG	"EmbaMunayGas" JSC		contributions	KTG	JSC "KazTransGas"	RoK	Republic of Kazakhstan
FAR	Fatality Accident Rate	IOGP	International Association of Oil and Gas Producers	KTM	LTD "JV "KazGerMunay"	SD	Sustainable Development
GOST	Set of technical standards maintained by the Euro-Asian Council for	KazGPZ	"Kazakh gas refining plant" LPP	КТО	"KazTransOil"	Samruk-l	Kazyna Fund "Sovereign Samruk Kazyna
	Standardization, Metrology and	KBM	JSC "Karazhambasmunay"	LTI	Lost-time Injury		Wealth Fund" JSC
	Certification (EASC), a regional standards organization operating	KGM	LTD "KazakhTurkMunay"	LTIR	Lost-time Injury Rate	TRIR	Total Recordable Incidents Rate
	under the auspices of the Commonwealth of Independent States		,	MMG	"Mangistaumunaygas" JSC	ULRS	Unified Labor Remuneration System
	(CIS)	KMG	"KazMynayGas NC" JSC	MTC	Medical Treatment Case	UN	United Nations
GRI	Global Reporting Initiative	KMG RN	1 "KazMunayGas refining-marketing" JSC	MVCR	Motor Vehicle Crash Rate	LINIECCO	: United Nations Framework
HSE	Health, Safety and Environment	KMG E&	P"KazMunayGas Exploration and Production" JSC	OMG	"OzenMunayGas" JSC	UNFCCC	Convention on Climate Change

Third party opinion

Environmental performance

	Upst	ream	Mids	tream	Down	srteam
	2015	2014	2015	2014	2015	2014
Greenhouse gases emissions (GHG)						
Direct GHG emissions (CO2, mln tons)	2,6	2,4	0,6	0,8	2,6	2,7
GHG emissions intensity (tons of CO2 on 1k of production)	121,0	110,0	9,0	11,0	181,0	181,0
APG flaring						
Volume of Associated gas flaring (mln tons of CO2)	0,6	0,5	-	-	-	-
Volume of gas flared per unit of production (tons per 1000 tons of production)	12,0	9,5	-	-	-	-
Flared gas (mln m3)	309,4	243,5	-	-	-	-
Energy intensity						
Energy consumption (mln GJ)	26,9	24,6	34,1	48,4	50,8	51,7
Energy consumprion intensity (GJ per 1 ton of production)	1,9	1,9	0,5	0,7	3,6	3,5
Pollutant emissions						
SOx (ktons SO2)	441,7	398,3	0,7	0,7	9,4	8,7
NOx (ktons NO2)	3,3	2,3	2,1	3,0	4,9	2,2
Spills						
Illegal tapping – volume (thousand tonnes)	0	0,03	0	0	0	0
Illegal tapping – number	0	1	3	1	0	0
Operational spills – volume (thousand tonnes)	0,02	0,00	0	0	0	0
Water						
Total water withdrawal (mln m3)	49,7	49,1	9,7	8,9	28,3	28,6
Water withdrawal intenisty (thousand m3 of water per thousand ton of hydrocarbon produced)	3,2	3,2	0,1	0,1	2,0	1,9
Water discharge volume (million cubic meters)	0,8	0,9	1,1	1,2	6,1	6,0
Produced water volume (million cubic meters)	122,1	n/a	-	-	-	-
Produced water intensity (mln m ³ per kton of oil production)	7,8	n/a	-	-	-	-
Waste						
Hazardous (ktons)	81,1	82,4	2,5	7,3	116,1	52,4
Non-hazardous (ktons)	14,1	20,1	8,2	8,1	12,8	19,8
Total waste (ktons)	95,2	102,5	10,6	15,4	128,9	72,2
Waste generation intensity (per ton of production)	4,6	4,9	0,2	0,2	8,7	4,3
drilling waste, onshore (ktons)	283,4	353,5	-	-	-	-
drilling waste, offshore (ktons)	2,1	1,8	-	-	-	-
Operational Process Safety Events	3	2	1	1	2	0

Biodiversity data

	Onshore		Offs	hore
	2015	2014	2015	2014
Sites in which biodiversity is covered in EIA or similar document (%)	100	100	100	100
Sites with regular environmental monitoring	100	100	100	100
Contracting territories (thousand ha)	454	454	194	194
Potential area of impact (thousand ha)	581	581	not defined	not defined
Special protected zones (thousand ha)	1498	1498	9815	9 815
IUCN management areas within area of potential impact (thousand ha)	223	223	0	0
UNESCO world heritage sites within area of potential impact (thousand ha)	0	0	0	0
UNESCO man and biosphere reserves within area of potential impact (thousand ha)	0	0	0	0
RAMSAR wetlands within area of potential impact (thousand ha)	0	0	65	65
Alliance for Zero Extinction area within area of potential impact (thousand ha)	0	0	0	0
Key biodiversity areas within area of potential impact (thousand ha)	n/a	n/a	n/a	n/a
Important bird areas within area of potential impact (thousand ha)	n/a	n/a	480	480
Total species in the Red Book (thousand ha)	82	82	111	111
Total IUCN listed wildlife mortalities (number)	5	5	n/a	n/a
Regional rare species (number)	27	27	14	14
Endemic species (number)	23	23	40	40

GRI Index

General standard disclosures

GENERAL STANDARD DISCLOSURES	Location in the report	Page Number	External assurance - this report has not undergone external assurance
STRATEGY AND ANALY	/SIS		
G4-1	A Message from Our Chairman & CEO	5	No
G4-2	Risk Management; Policy & management, Climate change	9, 26, 30-31	No
ORGANIZATIONAL PRO	OFILE		
G4-3	Contact information	62	No
G4-4	Our Operations and Assets	3, 12-13	No
G4-5	Contact information	62	No
G4-6	Our Operations and Assets	3, 12-13	No
G4-7	Contact information	62	No
G4-8	Our Operations and Assets	3, 12-13	No
G4-9	Our people; Our economic input	3, 12-13, 48-49	No
G4-10	About KMG	3	No
G4-11	Human rights	24	No
G4-12	Our Operations and Assets; Procurement practicies	3, 47	No
G4-13	Our Operations and Assets	3, 12-13	No
G4-14	Community engagement	43	No
G4-15	Interview with our Senior Vice-President; 2015 Year of HSE; Our Operations and Assets	6-7, 13, 14	No
G4-16	Our Operations and Assets	13	No
IDENTIFIED MATERIAL	ASPECTS AND BOUNDARIES		
G4-17	About our report	2	No
G4-18	About our report; Sustainability issues identified as "material" for KMG	2, 16	No
G4-19	Our approach to sustainability; GRI Index	17, 53	No
G4-20	About our report; Energy Use and Energy Efficiency; Greenhouse gases and ozone-depleting substances	2, 27, 31	No
G4-21	About our report	2	No
G4-22	not applicable	not applicable	No
G4-23	Sustainability issues identified as "material" for KMG; GRI Index	16, 53	No
STAKEHOLDER ENGAG	GEMENT		
G4-24	OUR STAKEHOLDERS	14-15	No
G4-25	OUR STAKEHOLDERS	14-15	No
G4-26	OUR STAKEHOLDERS; Climate change	14-15; 30-31	No
G4-27	Sustainability issues identified as "material" for KMG	16	No

GENERAL STANDARD DISCLOSURES	Location in the report	Page Number	External assurance - this report has not undergone external assurance
REPORT PROFILE			
G4-28	About our report	2	No
G4-29	About our report	2	No
G4-30	About our report	2	No
G4-31	Contact information	62	No
G4-32	About our report; GRI Index	2, 53	No
G4-33	About our report	2	No
GOVERNANCE			·
G4-34	Corporate Governance	8-9	No
G4-35	Corporate Governance	8-9	No
G4-36	KMG Annual report - Organizational structure	KMG Annual report	No
G4-37	Corporate Governance	8-9	No
G4-38	Corporate Governance; KMG Annual report - KMG Board of Directors	8-9; KMG Annual report	No
G4-39	*According to KMG internal regulations, the Group CEO cannot hold a position as Chairman of the Board		No
G4-40	KMG Annual report - KMG Board of Directors	KMG Annual report	No
G4-41	KMG Annual report - KMG Board of Directors	KMG Annual report	No
G4-42	Corporate Governance	8-9	No
G4-43	KMG Annual report - KMG Board of Directors	KMG Annual report	No
G4-44	Corporate Governance; KMG Annual report - KMG Board of Directors	8-9; KMG Annual report	No
G4-45	Risk Management Approach	9	No
G4-46	Risk Management Approach	9	No
G4-47	Risk Management Approach	9	No
G4-48	About our report	2	No
G4-49	Corporate Governance	8-9	No
G4-50	KMG Annual report - KMG Board of Directors	KMG Annual report	No
G4-51	KMG Annual report - KMG Board of Directors	KMG Annual report	No
G4-52	KMG Annual report - KMG Board of Directors	KMG Annual report	No
G4-53	KMG Annual report - KMG Board of Directors	KMG Annual report	No
G4-54	not reported due to confidentiality		No
G4-55	not reported due to confidentiality		No
ETHICS AND INTEGRIT	Υ		
G4-56	Advice Seeking & Grievance Mechanisms - Code of ethics	11	No
G4-57	Advice Seeking & Grievance Mechanisms - Code of ethics	11	No
G4-58	Advice Seeking & Grievance Mechanisms - Code of ethics	11	No

Specific standard disclosures

DMA and Indicators	Location in the report	Page Number	Identified Omission	Reason for Omission	Explanation for Omission	External Assurance - this report has not undergone external assurance
	CATE	GORY: ECONOMIC				
MATERIALA	SPECT: ECONOMIC PERFORMANCE					
G4-DMA	A Message from Our Chairman & CEO	5				No
G4-EC1	Our Economic Impact	48-49				No
G4-EC2	Interview with our Senior Vice-President; Climate change, KazMunayTeniz case study; Impact on Biodiversity	6, 30-31, 36-38				No
G4-EC3	Care for our people	21				No
G4-EC4	-	-		not applicable	KMG does not receive financial assistant from government	No
MATERIAL A	SPECT: INDIRECT ECONOMIC IMPACTS					
G4-DMA	Our communities	42				No
G4-EC7	Water management; Community engagement; Market presence; Impact chart	29, 42-43, 44, 48-49				No
G4-EC8	A Message from Our CEO; Community engagement; Market Presence; Impact chart	5, 42-43, 44, 48-49				No
MATERIALA	SPECT: PROCUREMENT PRACTICES					
G4-DMA	Procurement practices	47				No
G4-EC9	Procurement practices	47				No
MATERIALA	SPECT: RESERVES					
G4-DMA	Annual report: Upstream - proven reserves	KMG Annual report				No
OG1	Annual report: Upstream - proven reserves	KMG Annual report				No
	CATEGO	RY: ENVIRONMENTAL				
MATERIAL A	SPECT: ENERGY					
G4-DMA	Policies & Management; Energy Use and Energy Efficiency; Energy saving measures	26-28				No
G4-EN3	Energy Use and Energy Efficiency; Energy saving measures; Appendices	27-28, 52				No
G4-EN4	-	-	Energy consumption outside the organization is not presented in this report	Data is not monitored	According to the legislation we monitor energy consumption inside the organizations	No

DMA and Indicators	Location in the report	Page Number	ldentified Omission	Reason for Omission	Explanation for Omission	External Assurance - this report has not undergone external assurance
G4-EN5	Energy Use and Energy Efficiency; Energy saving measures; Appendices	27-28, 52				No
G4-EN6	Energy Use and Energy Efficiency; Energy saving measures; Appendices	27-28, 52				No
G4-EN7	Energy Use and Energy Efficiency; Energy saving measures; Appendices	27-28, 52				No
OG2	-	-		not applicable	The company does not invest into alternative energy resources	No
OG3	-	-		not applicable	The company does not invest into alternative energy resources	No
MATERIAL A	ASPECT: WATER					
G4-DMA	Water management	29				No
G4-EN8	Water management	29				No
G4-EN9	Water management; Appendices	29, 52				No
G4-EN10	Water management - Pavlodar refinery modernization project; Appendices	29, 52				No
MATERIAL A	ASPECT: BIODIVERSITY					
G4-DMA	Impact on biodiversity	36				No
G4-EN11	Protected areas; Appendices	36-38, 52				No
G4-EN12	Protected areas; Water management; Appendices	29,38, 52				No
G4-EN13	Conservation of biodiversity; Climate change; Appendices	30-31, 38, 52				No
G4-EN14	Protected areas; Appendices	37-38, 52				No
OG4	Impact on biodiversity; Appendices	36-37, 52				No
MATERIALA	ASPECT: EMISSIONS					
G4-DMA	Air quality management	30				No
G4-EN15	Greenhouse gases and ozone-depleting substances; Appendices	31, 52				No
G4-EN16	-	-	not included in this report	Current legislation requires monitoring of direct emissions only	Monitoring is planned to be done in future	No
G4-EN17	-	-	not included in this report	Current legislation requires monitoring of direct emissions only	Monitoring is planned to be done in future	No

DMA and Indicators	Location in the report	Page Number	Identified Omission	Reason for Omission	Explanation for Omission	External Assurance - this report has not undergone external assurance
G4-EN18	Greenhouse gases emissions intensity; Appendices	32, 52				No
G4-EN19	Greenhouse gases and ozone-depleting substances; Appendices	31-32, 52				No
G4-EN20	Greenhouse gases emissions intensity; Greenhouse gases and ozone-depleting substances; Appendices	31, 52	Quantative indicators are not presented	Incidents of ozone-depleting substances emissions are very rare and occur in insignificant amount	Our company conducts periodic monitoring of ozone-depleting substances emissions	No
G4-EN21	Pollutant emissions	33				No
MATERIAL A	ASPECT: EFFLUENTS AND WASTE					
G4-DMA	Waste management	34				No
G4-EN22	Water management; Appendices	29, 52				No
G4-EN23	Waste management; Appendices	34-35, 52				No
G4-EN24	Oil spill preparedness and prevention; Appendices	39, 52				No
G4-EN25	Waste management; Appendices	35, 52				No
G4-EN26	Location of production units in Relation to natural reserves; Protected areas; Conservation of biodiversity; Appendices	37-38, 52				No
OG5	Water management; Appendices	29, 52				No
OG6	World Bank Independent Opinion; Associated gas utilization; Appendices	32-33, 52				No
OG7	Waste management; Appendices	34-35, 52				No
COMPLIAN	CE					
G4-EN29	Payments for environmental impact & protection окружающей среды	40				
MATERIAL A	ASPECT: OVERALL					
G4-DMA	Policies and Management; Payments for environmental impact & protection	26, 40-41				No
G4-EN31	Policies and Management; Payments for environmental impact & protection	26, 40-41				No

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DMA and Indicators	Location in the report	Page Number	ldentified Omission	Reason for Omission	Explanation for Omission	External Assurance - this report has not undergone external assurance	
	CA	TEGORY: SOCIAL					
	SUB-CATEGORY: LABO	OR PRACTICES AND DEC	ENT WORK				
MATERIALA	SPECT: EMPLOYMENT						
G4-DMA	Our people	18				No	
G4-LA1	About KMG	3				No	
G4-LA2	Care for our people	21				No	
G4-LA3	Care for our people	21				No	
MATERIALA	MATERIAL ASPECT: OCCUPATIONAL HEALTH AND SAFETY						
G4-DMA	Occupational health & safety	18				No	
G4-LA5	Occupational health & safety	18				No	
G4-LA6	Occupational health & safety, Occupational health	18-20				No	
G4-LA7	Occupational health & safety	19				No	
G4-LA8	Occupational health	20				No	
MATERIALA	SPECT: TRAINING AND EDUCATION						
G4-DMA	Employee development	22				No	
G4-LA9	Employee development	22				No	
G4-LA10	Employee development	22				No	
G4-LA11	Employee evaluation	23				No	
MATERIALA	SPECT: DIVERSITY AND EQUAL OPPORTUNITY						
G4-DMA	Our people	18				No	
G4-LA12	About KMG	3				No	
MATERIALA	SPECT: EQUAL REMUNERATION FOR WOMEN AND MEN						
G4-DMA	Personnel motivation	23				No	
G4-LA13	Personnel motivation	23				No	
MATERIALA	SPECT: LABOR PRACTICES GRIEVANCE MECHANISMS						
G4-DMA	Grievance mechanisms	24				No	
G4-LA16	Grievance mechanisms	24				No	

Location in the report	Page Number	ldentified Omission	Reason for Omission	Explanation for Omission	External Assurance - this report has not undergone external assurance	
SUB-CATE	GORY: HUMAN RIGHTS					
SPECT: NON-DISCRIMINATION						
Human rights	24				No	
Human rights	24				No	
SPECT: FREEDOM OF ASSOCIATION AND COLLECTIVE BARGAINING						
Human rights	24				No	
Human rights	24				No	
SPECT: CHILD LABOR						
Human rights	24				No	
Human rights	24				No	
SPECT: FORCED OR COMPULSORY LABOR						
Human rights	24				No	
Human rights	24				No	
SPECT: SECURITY PRACTICES						
Anticorruption mechanisms	11				No	
Anticorruption mechanisms	11				No	
INDIGENOUS RIGHTS						
Human rights	24					
-	-	-	not applicable		No	
SUB-CATEGORY: SOCIETY						
SPECT: LOCAL COMMUNITIES						
Our communities	42				No	
Water management; Community engagement; Market presence	29, 36, 42, 44				No	
Community engagement	42				No	
-	-		not applicable		No	
-	-		not applicable		No	
SPECT: ANTI-CORRUPTION			1	ı	1	
Anticorruption mechanisms	11				No	
	SUB-CATE SPECT: NON-DISCRIMINATION Human rights Human rights SPECT: FREEDOM OF ASSOCIATION AND COLLECTIVE BARGAINING Human rights Human rights SPECT: CHILD LABOR Human rights Human rights SPECT: FORCED OR COMPULSORY LABOR Human rights SPECT: SECURITY PRACTICES Anticorruption mechanisms Anticorruption mechanisms S RIGHTS Human rights SUB-CS SPECT: LOCAL COMMUNITIES Our communities Water management; Community engagement; Market presence Community engagement	SUB-CATEGORY: HUMAN RIGHTS SPECT: NON-DISCRIMINATION Human rights 24 Human rights 24 SPECT: FREEDOM OF ASSOCIATION AND COLLECTIVE BARGAINING Human rights 24 Human rights 24 Human rights 24 SPECT: CHILD LABOR Human rights 24 SPECT: FORCED OR COMPULSORY LABOR Human rights 24 SPECT: FORCED OR COMPULSORY LABOR Human rights 24 SPECT: SECURITY PRACTICES Anticorruption mechanisms 11 Anticorruption mechanisms 11 S RIGHTS Human rights 24 SPECT: LOCAL COMMUNITIES Our communities 42 Water management; Community engagement; Market presence 29, 36, 42, 44 Community engagement 42 Community engagement 42	SUB-CATEGORY: HUMAN RIGHTS SPECT: NON-DISCRIMINATION Human rights 24	Nomission Nomi	Nomission Nomi	

DMA and Indicators	Location in the report	Page Number	ldentified Omission	Reason for Omission	Explanation for Omission	External Assurance - this report has not undergone external assurance
G4-SO3	Anticorruption mechanisms	11				No
G4-SO4	Anticorruption mechanisms	11				No
G4-SO5	Anticorruption mechanisms	11				No
MATERIALA	SPECT: COMPLIANCE					
G4-DMA	Human rights	24				No
G4-SO8	Our economic impact	48-49				No
MATERIALA	SPECT: EMERGENCY PREPAREDNESS					
G4-DMA	Oil spill preparedness and prevention	38-39				
MATERIALA	SPECT: ASSET INTEGRITY AND PROCESS SAFETY					
G4-DMA	Oil spill preparedness and prevention	38-39				
OG13	Oil spill preparedness and prevention	38-39				No
	SUB-CATEGORY	: PRODUCT RESPONSIBI	LITY			
MATERIALA	SPECT: CUSTOMER HEALTH AND SAFETY					
G4-DMA	Market Presense	44				No
G4-PR1	Market Presense	44				No
G4-PR2	Market Presense	44				No
MATERIALA	SPECT: PRODUCT AND SERVICE LABELING					
G4-DMA	Product marketing & labelling	44-45				No
G4-PR3	Product marketing & labelling	44-45				No
G4-PR4	Market Presense	44				No
G4-PR5	Working with clients	46				No
MATERIALA	SPECT: MARKETING COMMUNICATIONS					
G4-DMA	Product marketing & labelling	44-45				No
G4-PR6	Product marketing & labelling	44-45				No
G4-PR7	Product marketing & labelling	44-45				No
MATERIALA	SPECT: CUSTOMER PRIVACY					
G4-DMA	Product marketing & labelling	44-45				No
G4-PR8	Product marketing & labelling	44-45				No

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Please dedicate a few minutes to fulfill our survey on 2015 Sustainability Report. Your opinion is important to us as we continue to strive to improve our sustainability efforts.	Which of the following groups of stakeholders do you belong to?				
Your comments and suggestions would be greatly appreciated.	Employee				
	Local community member				
In which of the following topics you are interested the most?	Stakeholder				
Environment	NGO				
Occupational health and safety	Media				
Employee development	Supplier				
Community relationships	Customer				
Product responsibility	Business partner				
Company's economic impact	Authority representative				
Corporate Governance & Transparency	Other				
In your opinion what was the level of disclosure of material aspects presented in this report?	After reading the 2015 Sustainability Report, has your opinion of KMG Group been influenced at all?				
	Positively influenced				
Detailed	Not influenced				
Average					
Not detailed enough	Negatively influenced				
Please specify any topics you would like to see in the 2016 Sustainability Report?					



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