KARACHAGANAK SUSTAINABILITY REPORT 2014

TOWARDS SUSTAINABLE FUTURE

Karachaganak

BG GROUP eni Chevron LUKOIL КазМунайГаз

Partners in the Karachaganak Venture

KPO ACHIEVEMENTS IN 2014

Lost Time Incident rate made up **0.20**

Total Recordable Incident rate – **0.27**

Gas utilisation rate in the Karachaganak field reached **99.81%**

0 significant spills in the Karachaganak Field

KPO Local Content share in purchase of goods and services made up **47.38%**

Nationalisation of personnel in management made **70%**, in the category of professional and supervised workers - **95%**

KPO achieved the record level of stabilized and unstabilized liquid hydrocarbons' production totalled **142.5 mln BOE**

The deepest well of the **6,605 m** depth and the longest horizontal displacement of **1,625 m** was drilled

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OUR COMMITMENT TO SUSTAINABLE DEVELOPMENT

This is the seventh sustainability report issued by Karachaganak Petroleum Operating B.V. (KPO) with the aim to demonstrate our continuous commitment to sustainable development. In 2009, KPO was the first company in Kazakhstan to issue an independently assured sustainability report in accordance with international standards. In 2014, KPO became the first company in Kazakhstan to issue the Sustainability Report in accordance with the Guideline 4 of the Global Reporting Initiative (GRI G4).

In following the principles of sustainable development we take as a reference its widely acknowledged definition of the Brundtland Commission describing it as a "development that meets the needs of the present without compromising the ability of future generations to meet their own needs".

As a business, KPO considers its contribution to sustainable development to be:

- Minimising impacts and maximising opportunities linked to its presence;
- Considering the long-term consequences of its decisions;
- Engaging its stakeholders in a constructive dialogue; and
- Incorporating strong governance and transparency.

Dear Readers of the Report,

We are pleased to present the seventh Sustainability Report of KPO to all our stakeholders.

Today KPO remains committed to continuing development of the Karachaganak Field with the aim to maximize sustainable economic value applying industry leading technology at the highest industrial safety and environmental protection standards.

Our performance in 2014 has been successful and in this Report we disclose in detail how we delivered our sustainability commitments in environmental, economic and social areas.

Despite the economic and financial challenges currently faced by the oil and gas industry globally, we will strive to maintain our production levels and stable operations in 2015 mainly through effective use of our workforce. We understand that any disruption of operational processes will negatively affect all those stakeholders who are interested in successful implementation of the Karachaganak Project.

Creating a safe and fulfilling workplace for our employees is a priority for KPO, proved by reduction of the number of our Lost Time Injury targets in 2014, compared with 2013. Our environmental performance remains of world class level, including the GHG emissions reduction volume reaching 193 thousand tonnes of CO_2-equivalent.

We were driven by a sense of social responsibility during the incident in the School of Berezovka Village at the end of 2014. In this very challenging situation we did our best to support the local communities and the government authorities. More detailed information about the incident is provided in Chapter “Engaging with local communities” on pp. 112-113.

In the years to come KPO will operate the Karachaganak Field for the benefit of the Republic of Kazakhstan and the partner companies, maintaining the trust of its employees, authorities, local communities and other stakeholders.

In conclusion, we would like to inform the readers of our sustainability report that as of March, 2015 the role of KPO General Director rotated from BG (Damiano Ratti) to eni (Renato Maroli) and within this year there will be other gradual changes in the KPO’s top management.

Damiano Ratti	Renato Maroli
Previous KPO General Director	Current KPO General Director

KPO sustainability report discloses the sustainable development aspects and main achievements in environmental, economic and social areas. We view our Report as an instrument of dialogue with our stakeholders and we hope to obtain their feedback on our Report.

In 2014 KPO was one of the first companies in the Republic of Kazakhstan having issued its Sustainability Report for 2013 in accordance with the new Global Reporting Initiative's (GRI) Guidelines 4 (G4). This year we follow the same Guidelines maintaining the high level of transparency and openness in providing information about management approach, including the corporate governance, environmental standards and labour practices. This Report has been issued in accordance with the 'Core' Option of the G4.

KPO involves a third party in order to assure the transparency and credibility of the information given in the Report. The limited level independent assurance of the 2014 Sustainability Report against the GRI G4 has been provided by EY. The scope and terms of limited assurance are presented in the Independent Assurance Report on pp.142-143.

The 2014 was a successful year for KPO both in terms of delivery of our production targets and performing the sustainability commitments. As before, we continued working hard with respect to protection of the natural environment, providing a safe and fulfilling workplace for the employees, and generating enduring value for the Republic of Kazakhstan and our shareholders.

Safety and Asset Integrity

Our vision is to achieve maximum safety for maximum results. It is vital we conduct our operations in a safe and responsible way.

In 2014, the KPO's and contractors' lost time injury (LTI) rate reached 0.20, which is lower than in 2013. We improved our annual target in total recordable incident frequency having achieved 0.27 against the set target of 0.38. Among others, in acknowledgement of these achievements KPO received a Safety Award in the category '2014 Best HSE Performance' at the ENI Award ceremony held on 30 March 2015 in Milan.

Nevertheless, we are conscious that we should never remain complacent. We managed to reduce the number of lost time incidents from 11 in 2013 to 7 in 2014, none of them being linked with the operations.

Our target is to work towards zero incidents by preventing any high potential incidents and continuously raising hazard awareness both amongst our employees and all our contractors and sub-contractors delivering services and works in Karachaganak.

To this end, Process Safety and Asset Integrity areas progressed during the year with the focus on management of change and further integration of a risk-based approach.

Production and sales

Hydrocarbon production in Karachaganak in 2014 has reached a record level of 142.5 million barrels of oil equivalent. 8,818 million cubic meters of dry sour gas were injected into the reservoir, which is the volume equivalent to approximately 48.3% of the total gas produced. In 2014 minor incident-free shutdown activities were held with partial involvement of Unit 2 and total shutdown of Unit 3.

In 2014 KPO delivered over 10 mln tonnes of stabilised oil to western markets. As a result of successful implementation of incremental Summer Gas sales programme, KPO delivered a record volume of gas to Orenburg totalling 8.6 billion cubic meters.

In 2014 we celebrated a decade of stable export of liquid hydrocarbons via the Karachaganak-Atyrau Transportation System and further on to the Caspian Pipeline Consortium (CPC) pipeline system.

We continued our program of drilling wells and hooking them up to our production facilities and continue our plan to optimise production. The Western area of the Karachaganak Field has now been successfully drilled and first commercial oil has been proved to be recoverable. In 2014 we reached a record performance in drilling operations. The well 9838 the deepest well ever drilled to total depth (6,605 m) with the longest horizontal displacement (1,625 m).

Environment

The KPO gas utilisation rate reached 99.81% being sustained at a world-class level. Despite the increased volume of specific GHG emissions from 68 tonnes in 2013 to 75 tonnes of CO_2e per kiloton of hydrocarbons produced in 2014, KPO's readings are still far below the average European levels and the average international levels in the oil & gas industry.

Holding a Public Hearing to present KPO's Environmental Protective Measures Plan has become a normal practice at KPO. At the end of 2014 KPO obtained the Environmental Emissions Permit for 2015.

In May 2014 KPO received an American Chamber of Commerce's Award in HSE category at the official Annual Gala Ceremony held in Almaty. This award testifies the KPO's continuous commitment to the best environmental practices and standards.

Payments to the budget

In spite of all our continuous efforts aimed to improve the environmental protection measures and comply with the Republic of Kazakhstan legislation and international standards, KPO still paid KZT 2.5 billion in fines due to excessive emissions which made 5.5% of authorized air emissions. Expressing disagreement with the Court Ruling about imposing a penalty for the amount of KZT 2 billion, KPO appealed to the regional Court. However, the mentioned Ruling was left unchanged by the upper Court. The company then made a Claim to the Cassation Court, which has not issued its Ruling at the time of preparation of this Report.

Therewith, we are pleased to mention that in accordance with the 9th National Report on Implementation of the Extractive Industries Transparency Initiative (EITI) for 2013, KPO paid taxes in the amount of USD 1.2 billion to the budget of the Republic of Kazakhstan.

KPO's contribution to the Republic of Kazakhstan's social economic development was recognized by the RoK Ministry of Finance which awarded KPO in April 2015 in the nomination "The Best Tax Payer in 2013" for the West Kazakhstan Oblast and the Republic of Kazakhstan.

Development of personnel

As a result of implementation of the Nationalization programme in 2014, 8 senior and middle manager positions and 7 positions of professional and supervisory roles were nationalized at KPO, thus reaching our target of 70% and 95% in respective categories.

During 2014 about four thousand Kazakhstani specialists from KPO were enrolled in industrial safety, technical competence, management development programmes as well as personal and language skills training courses.

In the reporting year KPO invested more than USD 11 million to the training and development of Kazakhstani staff using international and in-house expertise, and through cooperation with well-known universities.

Investment into Economy

In 2014 the Kazakh content in provision of goods, works and services at KPO constituted 47% exceeding USD 470 million.

Early in the year KPO signed a Memorandum of Understanding with Aksai Industrial Park to define further actions for development of local businesses. KPO also supported the project aimed at local production by signing the agreement with Tenaris Global Company for construction of production unit in Aktau.

The social infrastructure projects completed by KPO during 2014 included tennis complex and roads in Uralsk as well as the House of Culture in the Kaldygaity village.

In the framework of the XXI World's Petroleum Congress KPO received a medal from KazEnergy Association for contribution into development of mutually beneficial cooperation.

Community Engagement

Our engagement with the local communities and authorities continued successfully, with two public hearings held on the following topics: KPO Environmental Protective Measures Plans for 2015 and Creation of Areal Network of Observation Wells at the Karachaganak field.

21 Village council meetings were held with local communities on the topics covering the environmental, economic and social issues of public interest.

This year in collaboration with the British Council Kazakhstan KPO implemented the English language teaching programme for Burlin District secondary school teachers. Thanks to this Programme, the local teachers had an opportunity to improve their skills in speaking English and the methods of teaching. Coaching[1] and mentoring components involving the native user of English made this programme a unique one.

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[1] *Note: Detailed definition of coaching as a training and development tool is provided in the chapters "People are Our Asset" and the "Glossary".*

The Karachaganak field is one of the world's largest oil and gas condensate fields located in north-west Kazakhstan and covering an area of more than 280 square kilometres.

The Karachaganak field is located in a remote and challenging working environment with the ambient temperature ranging from minus 40 degrees Celsius in winter to plus 40 degrees in summer. The field, the top of which is located at a depth of around 3,500 m, is some 1,600 m thick and very complex and unique. The hydrocarbons contain up to 4.5% of highly toxic and corrosive hydrogen sulphide, as well as carbon dioxide which can, in certain conditions, be highly corrosive.

According to the Reserves Re-Determination Report for the Karachaganak field accepted by the RoK State Reserves Committee (GKZ) at a meeting of the GKZ on 18.03.2014, it is estimated that the Karachaganak Field contains 12 billion barrels of liquids and 57 trillion cubic feet of gas, of which approximately 11% has been recovered to date.

Some 4,300 people work in KPO today in a talented and multicultural team. Since the signing of the Final Production Sharing Agreement (FPSA) in 1997, the Contractor (to date jointly the five Parent Companies under the Karachaganak Settlement Agreement and the Final Production Sharing Agreement) has invested more than USD 19.1 billion to develop the field, applying leading-edge technology aimed at maximizing sustainable economic value and minimising environmental impact.

KARACHAGANAK OPERATING FACILITIES IN 2014

An interconnected system

Hydrocarbon production and processing occurs at the three major units: the Karachaganak Processing Complex, Unit 2 and Unit 3. Approximately 2,000 kilometres of pipelines make up the infield system linking the major facilities and allowing efficient flows of production from the wells and among the units. At the end of 2014, 95 operating wells and 17 sour gas re-injection wells were online at Karachaganak, from a total well stock of 396 wells.

KPC

The Karachaganak Processing Complex (KPC) processes oil condensate from 44 production wells as well as feedstock transported from Unit 2. Oil and gas are separated through slug-catchers. The oil feed is treated by four stabilisation trains and pumped into the export pipeline to Atyrau for sale on international markets.

The fourth liquids stabilisation and sweetening train was built in 2011 and includes the expanded inlet facilities at KPC, a sour gas export compressor, a set of condensate booster pumps and export pumps, and two infield pipelines with associated tie-ins to Unit 3 and EOPS.

Early oil production satellite (EOPS)

EOPS was built and commissioned in 2000 to gather stream from oil producing wells and to evaluate well production capacity with further feeding to Unit 3 and KPC.

Unit 3

Unit 3 facility, operating since 1984, separates and partially stabilises gas and oil condensate from 28 incoming wells before exporting via pipeline to the Orenburg Gas Processing Plant in Russia.

Unit 2

Unit 2 is a multi-functional facility introduced in 2003. It is able to separate, process and re-inject high pressure sour gas. It produces partially stabilised oil, which it sends for stabilization at KPC prior to export. Twenty-five incoming production wells feed Unit 2.

Unit 2 utilises one of the highest pressure sour gas injection systems in the world. Three compressors are capable of injecting gas at a pressure up to 550 bar with a high H_2S content (9%).

This gas injection scheme has increased the sustainability of the Karachaganak field through the provision of partial pressure maintenance, improving liquid recovery and also eliminating the need to extract and store sulphur, delivering important environmental benefits to the region.

Eco Centre

The Eco Centre is a world-class waste treatment facility combining seven operational units dedicated to treatment of oil and gas drilling and production wastes:

- Thermo-mechanical cuttings cleaning facility enabling safe and efficient treatment of oil-base mud cuttings;
- Liquid mud plant, the processing facility for mixing and treating drilling oil-based mud;
- Liquid treatment plant enabling treatment of hydrocarbon contaminated water, recycling of brines used for work-over operations and reconditioning of water-based mud used in top hole drilling operations;
- Rotary kiln incinerator used to process oil contaminated soil and materials other than drilling cuttings;
- Landfill commissioned in 2011 ensuring safe disposal of solid waste with waste burial cells;
- General purpose incinerator launched into service in 2012;
- New facility for waste segregation launched in 2014.

Karachaganak Atyrau Transportation System (KATS)

KATS is the main export route for stabilised liquid hydrocarbons production at Karachaganak and has been in operation since 2003. The transportation system consists of a 24 inch buried pipeline from the Karachaganak Processing Complex to KPO Atyrau Terminal. There are two pumping stations: one at KPC, which is an intermediate transfer station, the other at Bolshoi Chagan, which is the main pumping station; and a receiving and storage facility in KPO Atyrau Terminal. In Atyrau, the line

connects to the Caspian Pipeline Consortium (CPC) system which transports oil to Novorossiysk on the Black Sea, where it is loaded on tankers and exported.

KPO operates and maintains all of the above facilities.

Karachaganak Orenburg Transportation System (KOTS)

KOTS consists of five pipelines, 140 kilometres in length that transport hydrocarbons from the Karachaganak field to the Orenburg Gas Plant in Russia. These pipelines were in existence prior to the FPSA phase of Karachaganak's development.

To date, all pipelines are used to transport hydrocarbons to the Orenburg Gas Plant. Two pipelines of 28 inches in diameter and two pipelines of 14 inches in diameter transport sour gas to the Orenburg Gas Plant for further treatment. Only one line of 14 inches in diameter is utilized as liquid export line.

OUR PRODUCTS AND EXPORT ROUTES

The majority of produced hydrocarbons are exported to maximize net sales revenues. In 2014 94% of liquid production was sold as stabilised oil to Western markets via the Caspian Pipeline Consortium (CPC) pipelines and the Atyrau-Samara pipeline via the Transneft system.

The CPC pipeline delivered KPO oil to the Black Sea port of Novorossiysk whereas the Atyrau-Samara pipeline was used to deliver oil to the Ust'-Luga port in the Baltic Sea. In 2014 the ongoing CPC expansion programme enabled KPO to export record volume of oil through the CPC pipeline, amounting to around 9.5 million tonnes. The remaining liquids were exported as unstabilised condensate to Russia via Orenburg or delivered to the local market.

The gas produced from the field is either re-injected into the reservoir to help maintain reservoir pressure, sold as raw gas under long term contract to KazRosGas, or sweetened (i.e. hydrogen sulphide is removed) to generate electricity for the KPO facilities and for local power companies LLP Aksaienergo and LLP Batys Energoresursy.

As a result of successful implementation of incremental Summer Gas sales programme in 2014 (delivery of gas during the period of planned maintenance of production facilities at OGP), KPO delivered a record volume of gas to Orenburg totalling 8.6 billion cubic meters. Including associated liquids, the incremental Summer Gas sales project resulted in total incremental production of about 2.5 million barrels of oil equivalent.

Within 2014 KPO re-injected 8.8 billion cubic meters of gas into the reservoir, a volume equivalent to about 50% of the total gas extracted, in order to maintain pressure and increase the future liquid recovery rate.

Our export routes

2014 OPERATIONS

In 2014, KPO produced over 142 million barrels of oil equivalent (BOE) in the form of stable and unstable liquids, and gas. Delivery of gas in 2014 reached 8.6 billion cubic meters, which is the highest historical record of KPO.

Table 1. Production in 2014

		2012	2013*	2014
Total Production	Mboe	139.5	136.0	142.5**
Total equivalent stable oil	kt	11,014	10,492	11,004
Total gas production	Mscm	17,519	17,531	18,248
Gas Injection *Gas re-injected into a reservoir, not sold*	Mscm	8,666	8,570	8,818
Sweet Gas *used at KPC for internal needs*	Mscm	**660.0**	**637.8**	689

** Shutdown year*
*** This figure does not include the volume of gas injection*

Table 2. Sales in 2014

		2012	2013	2014
Total Sales	Mboe	134.4	132.1	137.9
Unstable Liquids *Condensate to Orenburg Gas Plant and Small Refinery*	kt	850	914	732
Stable Liquids *Oil and stabilised condensate to CPC and Atyrau-Samara*	kt	10,246	9,700	10,269
Raw Gas *to Orenburg Gas Plant*	Mscm	8,039	8,197	8,594
Sweet Gas *to the WKO community*	Mscm	**130.4**	**98.7**	**114.3**

Shutdown

The KPO Shutdown strategy aims to optimise production by extending intervals between shutdowns and reducing actual shutdown durations whilst ensuring safe continuous operation and regulatory compliance.

In 2014 minor incident-free shutdown activities were held with partial involvement of Unit 2 and total shutdown of Unit 3.

Drilling

One more drilling rig was mobilised in October 2014 in the Karachaganak Field. In total, three drilling rigs and one work-over rig were in operation in 2014.

During 2014 equivalent of 7 new wells were successfully drilled, and 5 wells were hooked up. The programme of well workovers to optimise production and re-injection in the field continued. Five wells were successfully drilled and completed with the use of swelling packers and acid stimulation.

The record performance in Karachaganak drilling operations was made by the well 9838, the deepest well ever drilled to total depth (6,605 m) with the longest horizontal displacement (1,625 m). Such a good performance resulted from the lessons learnt associated with the previous extensive use of Rotary Steerable Systems (RSS) in the field operations.

The other highlight of the year is the 500 meter continuous coring activities in well 9844 resulting in 100% recovery factor.

Recent technologies introduced in KPO drilling operations in the year included:

- Preparation for applying the **expandable casing** technology in work-over and deepening activities.
- **Casing wear protector** allowing re-entering a well with high corrosion and old casing wear.
- **Production Water High Pressure separat**or system to support well clean-up operations allowing separation and management of produced water at well site. This kit has contributed to reducing emissions as it allows flowing of gas and oil in the production lines.
- **Fibre optic line** for measuring pressure and temperature downhole allowing improving reliability and data quality after replacement standard electronic permanent downhole gauges.
- **Well Tractor Robotics system** used for effective milling jobs and the RSS valves operations, without injecting aqueous fluids inside the well.
- Acroclear **well-site water treatment system** used at the well-site in conjunction with reduced emission packages, enabling the reduction of the H_2S content in the produced water for its safe storage and transportation.

Water Management strategy

Managing produced water is one of the main challenges facing the Karachaganak field where increasing produced water rates combined with a production facility which was not originally designed to handle significant water production is resulting in production losses, risks to asset integrity, and environmental compliance.

An additional challenge for KPO is locating sources of sufficient water required for production as well as potable water both for production personnel as well as personnel engaged on the construction of new facilities.

KPO is currently developing a field wide water management strategy that will address the issues of both produced as well as consumed water in the short, medium and long term to the end of the FPSA.

Power Generation Strategy

KPO has been exporting power to the WKO community since 2003. It has been exporting approximately 45 MW in winter and 27-45 MW in summer.

In 2014 the WKO Akimat requested that KPO increase the power export to 80-100 MW.

In order to be able to increase the power capacity, KPO will need significant additional quantities of sweet gas as well upgrade the power lines connecting KPC to the WKO power grid. These are major projects in their own right and in order to proceed with them KPO will need clarity and guidance on the RoK legislation, which will allow significant quantities of gas to be sweetened and sold at a price likely to be below market.

Following endorsement from the Authority, KPO will develop a cohesive strategy linking sweet gas production, power generation and upgrade of the power lines.

UPGRADE PROJECTS AND DEVELOPMENT ACTIVITIES

As the Contractor to the Republic of Kazakhstan KPO has an obligation to conduct all petroleum operations necessary to carry out the development and production of petroleum in the contract area in accordance with International Good Oil Field Practice. Following the completion of the Phase II Initial Program, KPO has an obligation to fund and implement the Phase II Maintenance Program (Phase IIM), which includes the further development of the Karachaganak Field including drilling new development wells, undertaking workovers on existing wells, upgrading production facilities and other projects required to maintain the production level to the economic benefit of the RoK.

During 2014 KPO continued to execute these development activities to include but not be limited to the following projects:

Gas-Oil-Ratio (GOR) Gas Balancing Project

The GoR Gas Balancing Project increases liquid hydrocarbons recovery by increasing the overall gas handling capacity of Karachaganak by connecting Unit 2, RMS-M and EOPS and hence re-routing low GOR wells from gas constrained facilities (KPC) to replace higher GOR wells currently producing at Unit 2 (which is not currently gas constrained) and thus maximising the overall liquids production at Karachaganak.

A further benefit of the GOR Gas Balancing Project is the flexibility to optimize production of higher

water cut wells by diverting them from KPC to Unit 2, allowing the KPC water treatment capacity to be used to increase flow from other water producing wells which are currently choked back.

The project was completed in 2014 to connect KPC and Unit 2 with two new 10-inch trunk –lines.

Phase IIM Plateau Extension Projects

Plateau Extension Projects aim to maintain the high current levels of production in accordance with the approved 2011 Field Development Plan (FDP) and its 2015 revision. Some of them, excluding purely operational maintenance projects, are described below.

a) Western Area Early Development

The Western Area Early Development (WAED) will extend the liquid plateau production by drilling six wells in the Western area of the Field. Further production will be realised through the optimisation of the gathering by installing an additional Remote Manifold Station (RMS-Y) and connecting trunk lines and test lines to KPC.

The appraisal of the WAED was undertaken with 2 wells drilling and side-tracking. Two wells 9816D and 9834 were completed and stimulated in Q1 2014. The RMS-Y project entered into the Execution Phase in Q2 2014.

b) Unit 2 Gas Injection Upgrade (GIU) Project

Unit 2 Gas Injection Upgrade is also part of the Plateau Extension Projects. It will upgrade the existing Unit 2 Gas Injection infrastructure to optimize the gas reinjection system of the Karachaganak Field by reducing downtime and increasing availability, reliability, flexibility, and gas reinjection capacity. The Project scope includes the installation of an additional fifth trunk line, drilling four additional injector wells and installation of additional Flash Gas Compressor. At the end 2014, the Project entered the pre-FEED phase.

c) Sour Gas Liquids Treatment Project

The Sour Gas Liquids Treatment Project targets increased value from the Karachaganak Field by diverting the export of unstabilised condensate from Orenburg, stabilising it in the KPC facilities and exporting it to high value western markets through the CPC pipeline. This project entered FEED at the end 2014.

d) KPC Gas Debottlenecking Project (KGDBN)

KPC Gas Debottlenecking Project will provide additional gas handling facilities at KPC. It will handle the increased volumes of produced gas as the field gas oil ratio (GOR) increases over time. In 2013 the project progressed through the selection of the most suitable size of a facility. In 2014, the development of the pre-FEED Design was completed and FEED stage commenced.

Karachaganak Expansion Project (KEP)

As consistent with obligations under agreement with the Republic of Kazakhstan in the longer term, KPO is continuing the phased development of the Karachaganak field via the Karachaganak Expansion Project (KEP), which will be completed in a phased manner.

The KEP project creates additional value for the contracting companies and the RoK to the end of the FPSA period, by optimising stabilised liquid sales through the provision of additional wells, process facilities and secure gas export routes, whilst aligning the objectives of all stakeholders.

The concept assessment and selection activities for KEP included the development of a quantitative risk assessment (QRA) model to evaluate the risk exposure of personnel during the construction and operation of the proposed new facilities. The outputs from the model have been used to ensure that the layout, segregation and design of the new facilities will reduce risks during these activities to the lowest practicable level.

The design features will utilise inherent safety in the design and minimise the exposure of personnel to process safety risks (including toxic gas risks) throughout the life of the new facilities. KEP is also seeking to utilise technological solutions that will minimise operator attendance, and so risk exposure, at process facilities.

Environmental impacts from the proposed new KEP facilities are being managed by the adoption of best available techniques (BAT) and air dispersion modelling of KEP emissions is being undertaken to assess any impact on the boundary of the Sanitary Protection Zone (SPZ) around the field.

During 2014 the Concept for the design of the first stage of the project KEP1 was agreed. A number of studies were carried out to further develop the design and these studies were completed at the end of the year. The next stage of the project will be the Front End Engineering Design (FEED) phase, which will further develop the design of the facilities and provide further detail on the design features.

Engagement of stakeholders into a dialogue is essential for sustainability and success for any business. We do our best to maintain a dialogue with our stakeholders as we view it as an important tool in building good relationships with them.

STAKEHOLDER ENGAGEMENT

Pic. 1. Key KPO stakeholder groups

Engagement with stakeholders in KPO is regulated by the relevant policies and procedures.

The process of stakeholder engagement is reflected in several company policies and procedures. In particular, **KPO Corporate Communications Policy** contains description of mechanisms and processes followed by KPO at the corporate level when communicating internally and externally. This procedure specifies responsible persons authorized to communicate on behalf of KPO with external stakeholders. Besides, there are other documents, such as **Internal Communications Policy, Memorandum of Understanding** between KPO, Maslikhat and Akimat of the Burlin District on the establishment of Village Councils in communities adjacent to the field, as well as Local **Content Development Programme**.

A Stakeholder Engagement Operating Procedure was developed based on the principles of International Finance Corporation (IFC), which require a focused, informative, open interaction with stakeholders with a better respond to local environment.

Given below are some examples of KPO's engagement with key groups of stakeholders during 2014:

Regulatory Bodies and Ministries

Apart from daily business correspondence and reports, we regularly hold meetings with the government authorities to discuss and clarify issues related to compliance with the requirements of

industrial, environmental and labour legislation. Participation in working groups, roundtables and conferences with the relevant ministries determine the key topics of our interaction, including the reduction of greenhouse gas emissions, improvement of performance, efficiency of cooperation with stakeholder groups, engagement of potential suppliers, etc.

In April 2014, KPO participated in the international forum “Maintenance Services and Machine Building in Oil and Gas Sector” in Uralsk, organized by the Oil and Gas Ministry of RoK and Akimat of Western Kazakhstan Region. More than 250 representatives of large companies participated in the forum. They discussed modern oil and gas technologies, issues of industrial automation, horizontal drilling technologies and oil and gas machine building development aspects in Western Kazakhstan. KPO was thanked by the Minister of oil and gas of RoK for active participation and holding the forum. The forum is a working platform for the XI Forum of Kazakh-Russian cross-border cooperation to be held in Atyrau in autumn of 2015. In addition, during the forum the participants shared their experience with international representatives of oil and gas industry, such as KPO.

In May 2014, KPO and the State Control Committee on Emergencies and Industrial Safety of the RoK Ministry of Emergency Situations held a joint seminar on industrial safety in Aksai to discuss issues on reduction of risk for community from man-made disaster, and the development of optimal solutions. Representatives of the Committee for State Control of Emergency Situations and Industrial Safety, Emergency Situations Department of Atyrau, Aktobe, Kyzylorda, Mangistau, Western Kazakhstan regions, managers and leading specialists of KPO attended the seminar. The seminar resulted in making decisions on reduction of risks at a production site, and an agreement was reached that such joint activities promote further strengthening of KPO cooperation with government authorities in the field of industrial safety. As part of the XXI World Petroleum Congress, which took place on 15-19 June in Moscow, KPO received a medal from the KAZENERGY Association for contribution to the development of mutually beneficial cooperation. Vice- Minister of Oil and Gas U. Karabalin noted the continued support and commitment of KPO to the interests of the Republic of Kazakhstan.

Employees

We are working on a regular basis to raise the awareness of our employees about sustainability by communicating the issues disclosed in our Sustainability Reports, conducting surveys and e-learning, and organising thematic workshops for relevant Departments on sustainability principles and reporting standards.

In June 2014, works in all corporate departments and at all production sites and contractor organizations were suspended to conduct safety meetings. The scheduled Safety Stand Up meetings were held one at a time, separately for each production facility, without interruption to the production process. The purpose of those meetings was to discuss in a team the importance of risk management to ensure safe activities at Karachaganak. The obligatory condition for the meetings was the presence of senior and middle management. The meetings outcome was re-emphasizing by the company's top management of their commitment to safety. Personal example of senior management made employees once again think about the importance of working safely to prevent incidents.

As part of cooperation with higher education institutions of Kazakhstan, KPO annually participates in forums organized by the Society of Petroleum Engineers SPE. On 18 April 2014 in Almaty, the

representatives of KPO Well Operations Department took part in the XI International Youth Oil and Gas Forum held with the support of the leading oil companies. Such events give young engineers the opportunity to meet with representatives of the leading oil and gas companies and learn about innovative technologies applied in the development of large projects such as Karachaganak.

Trade Unions

We work on maintaining effective relationships with Trade Unions. In 2014, KPO management continued meetings with Trade Union organizations to discuss the issues raised by employees about the working conditions, wages and social benefits. The results of these discussions will be considered in developing a new Collective Agreement. The signing of the new Collective Agreement is planned in 2015.

Also, during the reporting period, various sporting events for employees were held jointly with Trade Unions, such as competitions on football, mini-football, table tennis, volleyball, freestyle wrestling, billiards, chess, as well as cyclo-cross and cross-country skiing.

Contractors

Interaction with various contracting organizations of KPO is conducted at different levels: national, regional and local.
According to the annual HSE Improvement plan, KPO holds joint forums with participation of contractors on HSE issues. This creates an opportunity for targeted action to improve workplace safety in KPO and contracting organizations. In 2014 the role of supervisor in ensuring a safe workplace became the topic of discussion at the forum. In the KPO context, where safety is an integral part of the working process, the competence of safety procedures should be considered as an essential element of any activity at a workplace. At the end of the forum, the heads of contractors signed a document on personal HSE commitment, by which the company management undertook an obligation to assess the competence of supervisors and, if necessary, provide training to improve knowledge in the field of HSE. Realization of this commitment is expected within the next 12 months. The results will be discussed at a forum in 2015.
To ensure transparency of our procurement processes, the annual, medium- and long-term procurement plans are posted on the company's website. Also, the information on the preliminary assessment and registration of suppliers in the company's database is updated on the website to inform the suppliers about requirements of participation in tenders.

Local communities

The main tools of KPO engagement with local communities are public hearings and the Village Councils. KPO brings to the public hearings issues related to operational activities, which may affect the interests of local communities. Public hearings are held with the support of local executive body - Akimat of Burlin district. In June 2014, KPO presented for public consideration the Environmental Protection Measures Plans for the second half of 2014 and for the whole of 2015, which were approved during the hearing. More detailed information about this is provided in the chapter “Engaging with Local Communities” on pp. 109-110.

Village Councils are held regularly in the villages located in the area of KPO operational activity. At

these meetings the representatives of local community raise the issues related to improving infrastructure, including repair of roads and water systems, employment and air quality monitoring.

Through implementation of the Social Performance Plan in 2014, we were able to complement the social programmes of local authorities in the educational, healthcare and cultural areas. More information about this is disclosed in the chapter “Engaging with Local Communities” on pp. 114-117.

In order to raise the awareness and encourage effective participation of local communities in responding to emergencies during training exercises, security services and emergency response groups of KPO actively interact with villagers living in close proximity to the field and along the export pipeline Karachaganak – Bolshoi Chagan - Atyrau. This interaction with local communities in recent years contributed to the elimination of the number of illegal taps in the export pipeline.

Non-government organisations (NGO)

We actively engage with local and regional non-commercial organizations, participating and assisting them in carrying out various charity events to support socially vulnerable community groups.

In 2014, as part of the annual “HSE Award Incentive Program” KPO awarded three Public Foundations of Western Kazakhstan Region and Burlin District with Certificates for the amount of USD 2,000 each to carry out charity programs.

Membership in Associations

We consider our partnership in Kazakhstan associations, such as KazEnergy Association, Kazakh Association of Natural Resource Users on Sustainable Development and Kazakhstan Petroleum Association (KPA), as strategically important, because it gives us the opportunity to interact with other members of associations and provides access to their resources. This membership allows us to participate in Working Groups and Committees on key business issues.

In 2014, the KAZENERGY Association together with EY conducted a Review of Corporate Social Responsibility of Oil and Gas industry of RoK for 2012-2013. KPO took an active part in the preparation of the Review, the purpose of which was to inform a wide range of stakeholders in Kazakhstan and abroad about the contribution of Kazakhstan's oil and gas industry in the country's sustainable development. KPO presented its best practices in the field of corporate social responsibility in the Review, and shared plans to continue the cooperation with KAZENERGY Association in 2015 as well.

MATERIAL ASPECTS

Each year we work on improving our sustainability reporting process. This includes information exchange, collection of data and interdisciplinary communication both internally and externally. These, in turn, help us identify the material aspects of the Sustainability Report.

Material aspects for the present Report were identified in the course of the following activities:

- Engagement of KPO with the above mentioned stakeholder groups;
- Engagement through Village Council meetings when issues of community concerns are raised, as well as forums, public hearings, meetings and other engagement events with multiple stakeholders;
- Analysis of risks and opportunities;
- Joint exercises with employees to identify the key groups of stakeholders interacting with relevant KPO Departments;
- Thorough review of the Global Reporting Initiative Guideline 4 and its Oil & Gas Supplement.

Preparation of the Report includes several stages of validation inside the company: first drafts are prepared by key departments, who provide data on material aspects in their area of activity. Then, the content of the report is reviewed by the sustainability reporting group and is coordinated with the departments, who provide information. Next follows an assurance audit by an independent party to verify the content of draft Report in accordance with the GRI Guidelines. After that, lawyers and senior management of the company check and approve the draft Report with the subsequent verification by an independent party.

In order to increase the awareness of employees about aspects of sustainable development and to inform them about the material aspects disclosed in the 2013 KPO Sustainability Report the company conducted an electronic survey amongst employees via the Intranet. 12% of employees participated in the survey conducted in 2014. This survey, held on an annual basis, helps us learn the opinion of our employees about the Report and to get feedback on material aspects for disclosure in the next Report. The survey revealed some material issues that have been reflected in this Report. According to our employees, the most important issues are related to social and infrastructure projects in Aksai, pollutant emissions and air quality monitoring, landscaping, recycling and charity.
Taking into account that the sustainability reporting practice is a relatively new and developing process in Kazakhstan, in the next years we will do our best to engage with our stakeholders in a more effective way. Our aim is to raise their awareness about sustainability practices and receive their feedback.

Table 3 presents some material aspects that we considered important and necessary to highlight in this Report.

Table 3. Material aspects

		Material aspects
SOCIAL	LABOUR PRACTICES AND DECENT WORK	Employment
		Labour / Management relations
		Occupational health and safety of employees (also material for our contractors)
		Employees health protection
		Personnel development and training
		Diversity and equal opportunity
		Labour practices grievance mechanisms
	HUMAN RIGHTS	Human Rights Training
		Security practices
		Freedom of association and collective bargaining
		Human rights grievance mechanisms
	SOCIETY	Interaction with exposed local communities, methods of assessment and mitigation of impact
		Anti-corruption
		Grievance mechanisms on impacts on society
		Emergency preparedness, mechanisms of involvement of local communities
		Asset integrity and Process safety
ECOLOGICAL		Reduction of GHG and pollutants
		Management of waste and effluents
		Spills
		Water use
		Energy management
		Biodiversity and ecosystems conservation
		Environmental grievance mechanisms

ECONOMICAL	Nationalization (the proportion of senior executives in the organization)
	Impact of infrastructure investments in the territories with our presence, including support for local communities
	Investment initiatives to energy access for local community
	Local Content share in procurement of goods and services
	Procurement practices
	Transparency of payments to the government (EITI)

Effective governance process is essential for ensuring the sustainability of large-scale investments. KPO as a joint venture operates in the complex environment where the effective governance, controls, and assurance processes are vital to our ongoing success.

Since 1997, the Karachaganak Field has been developed and operated by Agip and BG, with principal operating functions being delegated to Karachaganak Petroleum Operating B.V. ("KPO"), an operating entity, currently owned by the five oil companies that constitute the investors (known individually as "Contracting Companies" and together as the "Contractor") who are party to the Final Production Sharing Agreement ("FPSA") with the Republic of Kazakhstan. The Participating Interest stakes are BG Group (29.25%), eni SpA (formerly Agip) (29.25%), Chevron Corporation (18%), LUKOIL (13.5%), and KazMunaiGas (10%) (since 2012 when KazMunaiGas, represented by KMG Karachaganak Limited Liability Partnership, acquired a 10% stake in the Contractor).

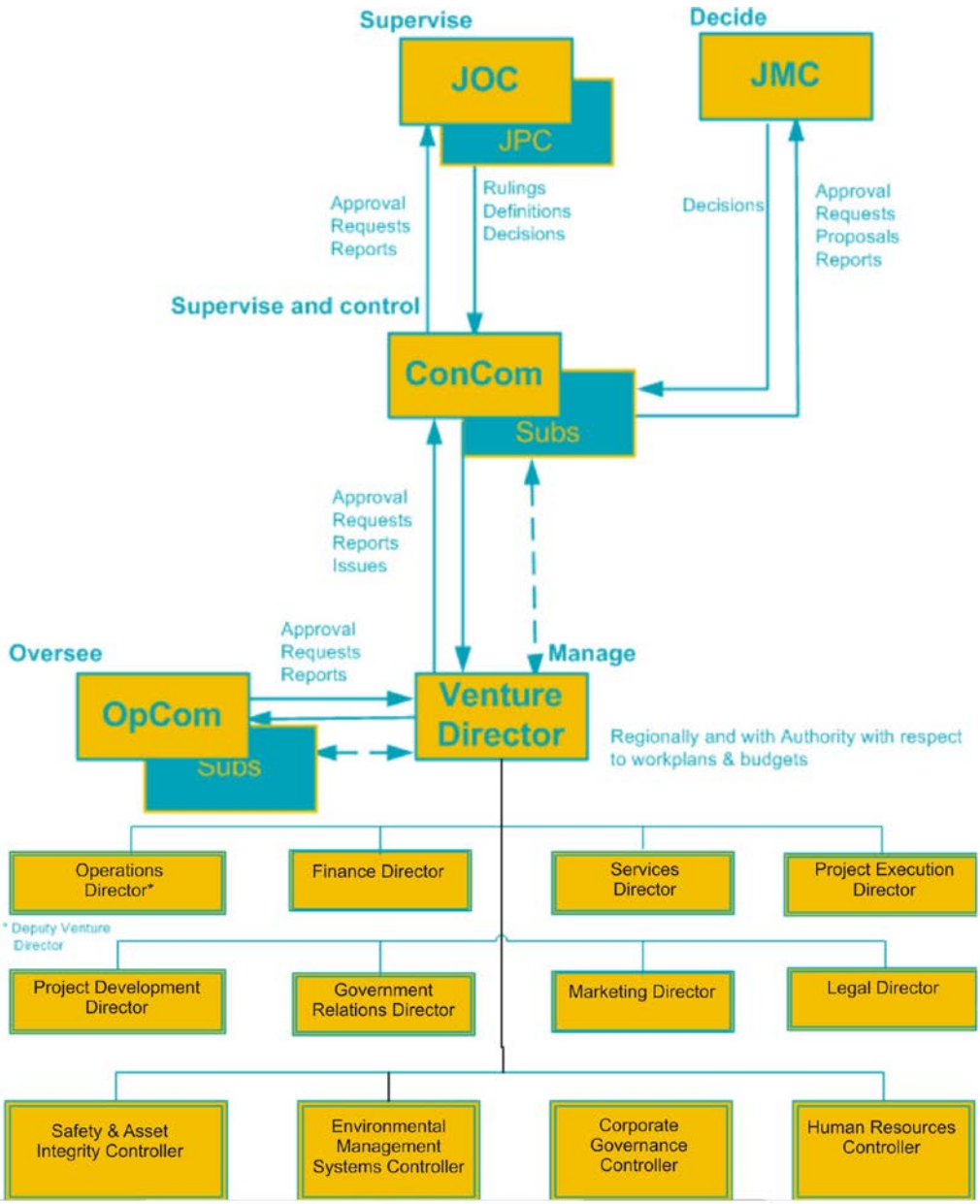
The FPSA places responsibility for the field development on the Contractor until January 2038. The above-mentioned five companies, constituting the Contractor pool, brought their combined international experience so that the maximum value can be realized from the Karachaganak Field.

ORGANISATION AND GOVERNANCE STRUCTURE

Our organisational structure has been designed to help us meet our business objectives and fulfil our obligations vis-a-vis the Republic of Kazakhstan.

The FPSA establishes two committees: the Joint Operating Committee ("JOC") and the Joint Marketing Committee ("JMC"). Both committees are formed from representatives of each of the five Contracting Companies and an equal number of members designated by the Authority (currently PSA LLC representing the Republic of Kazakhstan) under the FPSA. The Contractor and the Authority have equal voting rights. All decisions require a unanimous vote.

Pic. 2. Karachaganak Venture Senior Management structure



JOC – Joint Operating Committee

The JOC is responsible for the overall supervision of Petroleum Operations and Social and Infrastructure Projects. Matters pertaining to the JOC include review and approval of the annual Work Program and Budget, Social and Infrastructure Projects, and any changes to the Field Development Plan. JOC meetings take place at least twice a year.

The JOC is chaired by a representative from amongst the Authority's members. The KPO General Director and his Deputy have the right to participate in the work of any JOC meeting, but do not have voting rights.

JOC members are remunerated by their respective companies and selected by the senior management of each participating entity based on each candidate's individual experience and respective companies' policies.

The Joint Procurement Committee ("JPC") is a sub-committee established by the JOC, which is responsible for the approval or endorsement of all Major Contracts to be awarded by KPO, and acts in accordance with the JOC Tender Procedures as approved by the JOC.

Membership and voting rights for the JPC are similar as for the JOC, and its decisions also need to be unanimous.

JMC – Joint Marketing Committee

The JMC is responsible for all the activities relating to the marketing of hydrocarbon and non-hydrocarbon products. This Committee approves proposals concerning transport, processing, swap and sale of petroleum products. Decisions are taken with the objective of maximising net revenues.

Contractors' Committee

The Contractor's most senior management body is the Contractors' Committee ("ConCom"). The ConCom is responsible for the determination of the Contractor's position on any issues to be discussed and voted upon at the JOC and JMC.

Membership of the ConCom is comprised of representatives from each of the five Contracting Companies with KPO management in attendance. All decisions are made by the affirmative vote of the Parties having individually or in the aggregate a Participating Interest of not less than 90%. A number of sub-committees also meet regularly during the year to assist and advise the ConCom in specific areas of expertise.

The ConCom currently has the following sub-committees:

- Finance,
- Tax,
- Legal,
- Audit,
- Work Program and Budget,
- Insurance,
- Government Relations and Communications,
- Contractor's Marketing Committee (CMC).

Operating Committee

The next level of the management body is the Operating Committee comprising representatives of the operator companies: BG and eni. The Operating Committee performs overall control over KPO activities and ensures Operator companies to fulfil their obligations.

A number of sub-committees for Operating Committee are also in place to support specific areas of expertise, such as HR, HSE, Security and Sustainability.

KPO Top Management positions

The General Director, the Operations Director and other directors of KPO are nominated by their respective Parent Companies. The roles of KPO senior directors are rotated on average every three years between BG and eni.

MANAGEMENT SYSTEMS

In all aspects of its activities and in accordance with the FPSA, KPO operates to internationally recognized standards which are implemented in KPO through a series of policies, procedures and appropriate best practices. These are embedded in our management systems and include our

Code of Conduct, Health, Safety and Environment (HSE) Management System, HSE Policy, Operations Management System and Corporate Management System Manual.

Our Occupational Health and Safety Management System and Environmental Management System are certified to comply with the OHSAS 18001 and ISO 14001 standards respectively.

KPO developed and issued its Sustainable Development Charter in 2009. This Charter laid the foundations and set the guiding principles for the KPO's efforts towards sustainable development; and is drawn from international best practice and the Operator Companies' experience.

The KPO Sustainable Development Charter is available externally at www.kpo.kz, and to employees on the company's Intranet.

RISK MANAGEMENT

Within KPO a formal Risk Management process has been established to identify and effectively manage the business risks, which could be experienced by the Company during its activities. This process as well as roles and responsibilities is defined within the Risk Management Procedure.

Corporate Governance Controllership facilitates the constant development of risk management system and is responsible for maintaining the Corporate Risk Register. Corporate Risk Register contains the risks which may occur and have an impact at a corporate level and associated action plans to mitigate these risks.

The top corporate risks are reported to and discussed on the quarterly KPO Risk Committee meetings by representing all KPO Directorates and Controllerships. After each Risk Committee, the Corporate Governance Controller provides the ConCom with the quarterly Risk Register Report which details the main changes to the KPO top risks.

Due to the nature of our business, sustainability risks are of primary importance for us. Such risks include, but not limited to:

- personnel safety and asset integrity risks;
- environmental risks that may be related to accidental loss of containment; environmental compliance and permitting issues;
- ethical compliance risks;
- attracting and retaining qualified national personnel;
- related reputational impacts.

We regularly review these risks at our Risk Committee and aim to identify and implement measures to reduce their likelihood and potential impact. More detailed information on such measures is presented in relevant chapters of this Report.

ASSURANCE

KPO systems and policies are subject to an annual audit program, which provides assurance to the KPO management and the contracting Companies that effective and efficient processes are in place to identify and manage risks, including sustainability risks, and to ensure compliance with approved processes. Internally, assurance activities are undertaken by the Internal Corporate Audit group. Specific areas are identified for audit each year using KPO's internal risk management process, discussions with directors, Contracting Company requests and KPO's own Audit Model, which details KPO process areas and the required audit frequency for each area.

During 2014 our governance and assurance programs delivered over 35 assurance reviews, assists and workshops, 3 capital project forums and 8 internal audits.

External assurance reviews also occur on a regular basis, including an annual Contracting Companies Audit to give assurance that KPO complies with its own policies and standards and industry best practices, and regulatory reviews to ensure compliance with the applicable Kazakh legislation. The 2014 Contracting Company Audit was conducted in November 2014 and reviewed such areas as Legal Compliance, Finance, Contract Management, Project Management, Risk Management, and Information Technology.

SUSTAINABILITY

We also see significant opportunities for us in developing national personnel, attracting and supporting qualified local suppliers, and aiding the social development of regional communities.

Preparation of Sustainability reports for the last 6 years has been a learning opportunity for KPO, as it has improved interdisciplinary cooperation within KPO, engagement of the KPO senior management in issues around the long-term sustainability of the business and raising internal and external awareness of good reporting practices in accordance with the GRI Guidelines. The overall reporting process contributes to regular improvement of business processes and helps us gain a more holistic understanding of our organization. Every year we note positive changes in our interdisciplinary cooperation inside the company and in the involvement of senior management in issues of long-term sustainability of business.

EXTRACTIVE INDUSTRIES TRANSPARENCY INITIATIVE

KPO supports the Extractive Industries Transparency Initiative directed at ensuring of transparency of incomes and overall chain of value creation in management of RoK natural resources.

In accordance with EITI standard requirements, extractive industries are obliged to publish its information on payments and the governments of these countries must publish sums of the revenues.

KPO provides EITI reports to the RoK authorised bodies since 2014. In previous years such reports were provided by KPO Parent companies on its behalf. Previously all reports were presented to the

RoK Ministry of Oil and Gas (currently Ministry of Energy). The last two reports for 2012-2013 with amendments as of 27.10.2014 were provided to the RoK Ministry of Investments and Development.

The report for 2014 will be formed with involvement of all responsible parties only after notification on reports provision received from respective RoK ministry.

In January 2015 KPO developed the procedure on preparation of the EITI report that envisages the necessary actions and obligations to fully ensure the credibility, transparency and completeness of the provided information.

COMPLIANCE FRAMEWORK

Code of Conduct

The Compliance Framework regulates and provides guidance on all aspects of Compliance throughout the Company and establishes KPO's fundamental values and core beliefs, cascading and applying these throughout the organisation. The main point of reference within the Compliance Framework is the Code of Conduct. This Code establishes the core ethical principles, values and behaviours that govern how KPO conducts its business.

A revised Code of Conduct was introduced in June 2014. Our core values are set forth in the Code of Conduct as follows:

"KPO is a complex organisation that employs personnel of various nationalities and cultures. Maintaining and enhancing KPO's reputation requires that all of us work and behave to high standards both in dealing with each other in KPO and with the outside world.

Achieving outstanding performance in the long term delivery of our business goals can only be achieved, if we are an organisation where everyone's behaviour conforms to a set of principles of high standard and sustainability.

Our success must be based on high levels of integrity in our business relationships, with best practice applied in providing safe and secure working environments, where everyone is given opportunities to develop and all are treated fairly in a transparent and rewarding environment.

KPO will always seek to play a responsible and constructive role, aligning its business objectives with the aspirations of the communities within which it operates. Different cultural and social aspects will be respected and considered as a major part of our values. We have respect for and manage our impact on the environment and the society in which we work, and will ensure that a consistent and fair approach is applied in our dealings with stakeholders, service providers, and customers."

When contracting with vendors, suppliers or other sub-contractors, the KPO Code of Conduct is attached as part of the contractual documents to inform the business partner of the standard of ethical business KPO sets in its business relationships.

The Compliance Framework is managed by the Legal Compliance Counsel and Compliance Coordination Manager, both of whom report to the Legal Director.

KPO has a Compliance Committee, which is chaired by the Legal Director and attended by the General Director and other members of the KPO senior management. The Committee meets quarterly and oversees all matters relating to Legal Compliance in KPO. The Committee reviews the

actions of the Legal Compliance team and approves the actions and reports of the Legal Compliance Counsel, or may refer the matter/report back for further action.

The Compliance Committee reports all relevant matters to the Operator and the Contracting Companies through various committees, including the Audit Sub-Committee.

Code of conduct and anti-corruption awareness and training

Providing training on ethical norms and standards to personnel is important for international companies due to their multinational nature of their staff. All KPO new starters must complete an introductory training course on the Code of Conduct. The objective is to ensure that all KPO employees are aware of KPO's expected standards of behaviour and their personal obligations under the Code of Conduct.

The Code of Conduct and other ethical compliance policies are also placed on the KPO intranet for each employee to read. To facilitate ongoing awareness of their personal Compliance obligations, all KPO employees are required, on an annual basis, to acknowledge having read the policies. Employees who do not have access to the intranet are provided with hard copies and a signed acknowledgement is obtained. By the end of December 2014, over 83% of KPO employees have confirmed their familiarization with the Compliance Declaration. In 2015 we plan to introduce online Compliance training modules for all KPO employees.

The Compliance Department provided anti-corruption training courses for employees in various departments including Contracts & Procurement, Warehouse and Logistics, Travel Section, Visa Section, and Transport Department. This training included awareness of the risks of facilitation payments and bribery.

Moreover, since 2013 KPO has been organising training for contractor companies. In September 2014, KPO conducted an Ethical Compliance Annual Workshop for 17 of our contractors, including our 10 major contractors. The workshop was attended by 20 senior company representatives. Two presentations on Ethical Compliance, which were presented at the workshop, included the KPO Code of Conduct.

KPO insists on creating a fair and equitable business environment where the ethical business principles in the KPO Code of Conduct are the foundation for all its relationships.

Hotline and other compliance measures

A toll-free, anonymous and confidential Hotline has been functioning in KPO since 2012 as another step in the Company's legal Compliance programme. KPO signed an agreement with a leading accredited international supplier of this service – NAVEX Global.

Available 24-hours a day the Hotline provides a means for employees to report potential legal or ethical offenses, including discrimination, sexual harassment, conflicts of interest, safety or environmental violations and/or improper financial practices or bribery. The caller is allowed to choose between a telephone report and a written account of the alleged misconduct. KPO is then provided with the report from the caller, which report is then duly considered by the Legal Compliance Counsel and Compliance Coordination Manager to determine the appropriate action.

During 2014, KPO received 12 reports on the Hotline, which were duly considered and the appropriate action taken. Most of the complaints related to Human Resources issues, and these were addressed in accordance with KPO's Grievance Handling Procedure and Discipline Handling Procedure, depending on the nature of the situation.

Those matters that related to allegations of ethical misconduct were investigated in terms of the Compliance Assurance Investigations Guidelines and the reports were provided to the KPO Compliance Committee.

With the implementation of the Hotline, KPO met one of the measures of international recognition for combating bribery and corruption. The Hotline also provides an important forum for KPO's employees and contractors to ensure a fair and safe working environment.

The Legal Directorate also maintains a set of registers whereby compliance related matters are recorded, including for example, hospitality and travel provided to non-KPO persons, thefts of KPO property, corporate gifts and hospitality received by KPO personnel, and allegations of corruption.

In 2014, KPO introduced the Fraud Policy and the Contract Management and Administration Procedure. The Fraud Policy provides rules regarding allegations of fraud, identifies who is responsible for assessing fraud risk, the investigation procedure and the reporting structure. The Contract Management and Administration Procedure provides instructions and guidelines on how to effectively manage and control post-award contract administration activities undertaken by KPO User Departments during the execution of awarded Contracts.

Anticorruption due diligence process

KPO's shareholders are international integrated oil companies and are obligated to comply with international laws applicable to their home countries. KPO also has to comply with the following legislation:

• The Kazakh legislation on bribery, encompassing three types of responsibility for receiving/giving a bribe, as well as mediation in bribery;

- RoK Criminal Code - Articles 253 (commercial bribery), 366 (receiving a bribe), 367 (giving a bribe) and 368 (mediation in bribery);
- RoK Administrative Violations Code – Articles 676 (granting of illegal financial remuneration), 677 (receiving of illegal financial remuneration from individuals authorised for the performance of state functions or to persons equated to those), 678 (granting of illegal remuneration from legal entities);

• US Foreign Corrupt Practices Act;

• Italian Decree 231; and

• UK Bribery Act, 2010.

Accordingly, KPO seeks assurance that all business partners, suppliers, vendors, contractors and service providers also adhere to ethical business practices.

KPO and its counterparties – vendors, suppliers, agents, freight forwarders, sub-contractors, etc., are obliged to comply with applicable Kazakh laws and compliance legislation of home countries of the Contracting Companies, and these obligations are incorporated in KPO's standard contracts.

In order for KPO to meet these challenges and requirements, we need the cooperation and support of our business partners. One of the key areas of concern is the prevention of corruption, bribery and money laundering.

A key way we do this is to "know our business partners" and to request that our partners provide certain information with regards to their undertakings in respect of their activities and operations. For this purpose, KPO implements an Ethical Due Diligence programme to determine the risks associated with each of its potential business partners and to introduce mitigation measures to those aspects that may pose a risk. A questionnaire is sent to each counterparty requesting information regarding its ownership, management and conduct of business including its ethical business practices. This information is used to carry out a risk assessment. KPO also uses international databases to confirm the company's corporate information and whether there are any negative reports regarding its business conduct.

To date, a large number of companies have been assessed, and KPO is confident that the process has alerted our contractors, suppliers and vendors to KPO's high standards of ethical business.

As part of KPO's implementation of this process, KPO also assists local companies to comply with KPO's ethical requirements. The Contract & Procurement Department provides local companies with pro-forma documentation, through which they are able to draft their own Code of Conduct and revise their contractual documents, including those that could be used for subcontracting services, or for the procurement of equipment or materials.

Health and Safety of all KPO and contractor employees as well as community affected by our activities alongside with safe operation of our facilities are the main criteria for the Company's successful operations. Development and operation of the Karachaganak field may have some risks associated with high content of hydrogen sulphide in crude hydrocarbons and with high pressure. In order to create safe occupational conditions, the Company takes a proactive approach to the HSE and asset integrity management.

Table 4. Our targets in safety

Our 2014 targets	Target achievement	Actions taken in 2014	Targets for 2015
Conduct re-certification Audit to ensure compliance of KPO's HSE MS with ISO 14001 and OHSAS 18001 standard requirements	Yes	Re-certification audit was conducted in 2014 and as a result KPO HSE MS was re-certified in compliance with ISO 14001 and OHSAS 18001 standard requirements.	Conduct a surveillance audit in 2015
Develop and agree a strategy for the Major Accident Hazards Awareness roll-out Programme to Level 3 Managers/ Superintendents	Yes	Major Accident Hazards Awareness Program for Level 3 Managers has been developed, strategy agreed and Program delivered.	Provide support in facilitating Major Accident Hazards / Asset Integrity Workshop for PSA and KPO management in Spadeadam, UK.
Facilitate Safety Case update process	Ongoing	Safety cases have been developed and approved for the operated facilities (Unit 2, Unit 3, KPC, Gathering, EOPS, KATS and KOTS).	Facilitate the development and approval of Field Safety Case and Well Operations Safety Case
Develop Field and KPC DSIUs (Declaration of Safety for Industrial Units)	Yes	Field and KPC DSIUs have been updated and approved by the Regulator.	Facilitate an update of Wells DSIU to account new RMS-Y project.

Provide Technical Safety support to the field expansion projects as well as to other brownfield enhancement projects	Ongoing	Technical safety support has been provided to the following projects: • KPC Sour Gas Liquids Treatment Project; • KPC Gas Debottlenecking Project; • Unit 2 Gas Injection Upgrade; • Well 703 Work–over (WO);	Continue technical safety support to KPO departments on the following projects: • Unit 2 Gas Injection Upgrade; • Well 703 Work-over; • KPC Water Handling; • KPC 2nd Knock Out Drum; • KPC Fuel Gas Polishing.
Implement Contractor HSE Management performance review Program for high and medium risk contracts	Yes	Contractor HSE Management Strategy has been finalised and communicated to KPO Contract Owners.	Monitor and improve Contractor HSE Performance to ensure all works performed safely and higher HSE performance indicators achieved.
Develop and roll out Quarterly Safety Awareness campaigns for office personnel	Yes	4 Quarterly Safety Awareness campaigns for office personnel have been developed and rolled out.	
Promote focused HSE Competency Enhancement Program for line supervisors	Yes	Safety Competency Enhancement Training Program covering 4 elements of HSE competency assessment developed and delivered to KPO supervisors.	Continue development and implementation of HSE Competency Enhancement Program for line supervisors

Hold one major Contractor HSE Forum to enhance HSE culture and discuss HSE issues	Yes	HSE Forum was held in June with representatives from 40 contractor's companies. The theme of discussion was the role of supervisors in ensuring safe workplace. As a result, top managers of 36 contracting companies, performing high risk operations in the area of HSE, signed the Pledge of Personal Commitment to HSE. By that document the subcontracting organizations confirmed their responsibility to perform assessment of the supervisors' HSE competence and, if necessary, arrange additional training. The results shall be presented at the next 2015 forum.	Hold one major Contractor HSE Forum. One of the issues on the Forum agenda will be discussion of the results for implementation of Contractors HSE Competency Enhancement Program for supervisors.
Implement the 2014 actions related to the Karachaganak Field Wide H_2S emergency response study	In progress	9 actions from the study were included into 2014 plan with overall coordination by Risk Management team. The actions were partially implemented due to budget and resource constrains, complicated engineering works and integration with existing systems. The actions have been partly implemented in 2014 and will be continued in 2015.	Continue implementation of safety enhancement projects resulted from Karachaganak Field Wide H_2S emergency response study planned in 2015.
Communicate and implement the KPO HSE Risk Management Framework	Yes	KPO HSE Risk Management Framework was developed and communicated to the personnel.	
Implement Minimum Manning Philosophy within the field for FAB and Pilot camp	In progress	Move of personnel from the Field to Aksai was postponed.	• Implement Minimum Manning Strategy within the field. • Coordinate the FAB and Pilot Camp personnel relocation to Aksai

HSE MANAGEMENT SYSTEM

KPO HSE Policy establishes the main principles of operation and strategic objectives in HSE, demonstrating the Company's commitment to the effective HSE management, continuous performance improvement and compliance with all legislative requirements. The Policy meets the requirements of the parent companies, other KPO policies, international standards ISO 14001, OHSAS 18001, and legal requirements.

KPO has developed and implemented the HSE Management System, which includes all main system elements, structure description, employees' roles and responsibilities, as well as activities performed by the Company. The purpose of the management system is efficient and rational HSE risk management. There have been developed and implemented corporate and internal procedures with detailed description of the processes to manage the main elements of the HSE Management System.

There are various types of HSE risks in KPO, which makes risk management one of the key area of operations. For this purpose KPO has developed and implemented appropriate risk management procedures, which describe approaches and techniques required to ensure that the risks are assessed, managed and/or reduced to the tolerable level. The risk management process includes identification of hazards and HSE aspects, assessment of risks to the life and health of people and environment as well as identification of necessary control measures.

In KPO a Permit-To-Work system with additional certificates is used to control and supervise high risk activities, risk assessment and detailed work plan are prepared prior to execution of complex, hazardous and non-routine works.

KPO has an industrial control standard, process safety and asset integrity procedures, management of change procedures in place required for implementation of relevant measures of managing and mitigating risks of process incidents and major accidents that could happen as a result of uncontrolled processes during operations at any unit (especially those involving release of hazardous substances, fires and explosions).

In addition, the Company has incident notification and investigation procedures in place, which cater for:

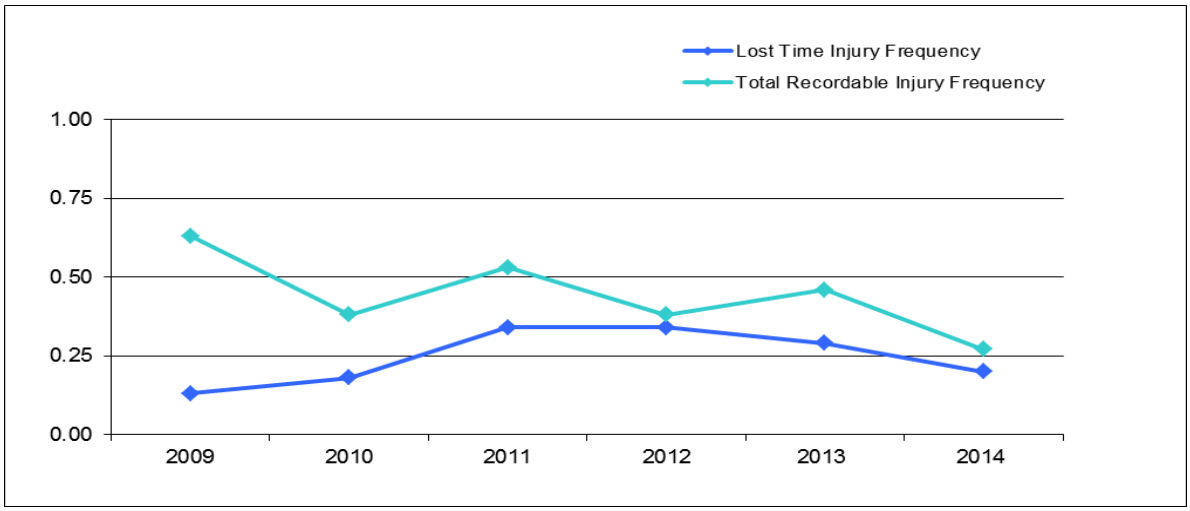
- Timely notification of any events, including minor injuries, first aid cases, high potential incidents.
- Prompt elimination of their consequences,
- Ensuring efficient and systematic investigation.

All incidents that occurred during working hours at the KPO facilities shall be immediately reported. This requirement applies to all KPO and contractor employees. Every incident is thoroughly investigated and all incident details are registered with the Synergy database with further tracking of corrective actions.

SAFETY PERFORMANCE

This Section details overall 2009-2014 Health and Safety performance review. Graph 1 shows the Lost Time Injury Frequency (LTIF) and Total Recordable Injury Frequency (TRIF) in KPO. In 2014 LTIF was 0.20 (0.29 in 2013) and TRIF – 0.27 (0.46 in 2013).

Graph 1. LTI Frequency and TRI Frequency: KPO and Contractors



The following method is applied in KPO for calculation of LTI and TRI frequencies:

- LTI Frequency (LTIF) = Number of LTIs (Lost Work Day Case + Fatality) x 1,000,000/man-hours
- TRI Frequency (TRIF) = Number of TRIs (Lost Time Injury + Medical Treatment Case + Restricted Work Day Case) x 1,000,000/man-hours

Table 5 shows KPO LTIF versus Contractors LTIF.

Table 5. Lost Time Injury Frequency - KPO vs Contractors

Performance Indicators	2009	2010	2011	2012	2013	2014
Lost Time Injury Frequency (KPO)	0.21	0.00	0.71	0.42	0.58	0.14
Lost Time Injury Frequency (Contractors)	0.10	0.23	0.21	0.30	0.17	0.22

Table 6 shows KPO TRIF versus Contractors TRIF

Table 6. Total Recordable Injury Frequency - KPO vs Contractors*

Performance Indicators	2009	2010	2011	2012	2013	2014
Total Recordable Injury Frequency (KPO)	0.43	0.11	1.00	0.42	0.58	0.14
Total Recordable Injury Frequency (Contractors)	0.69	0.47	0.36	0.36	0.41	0.32

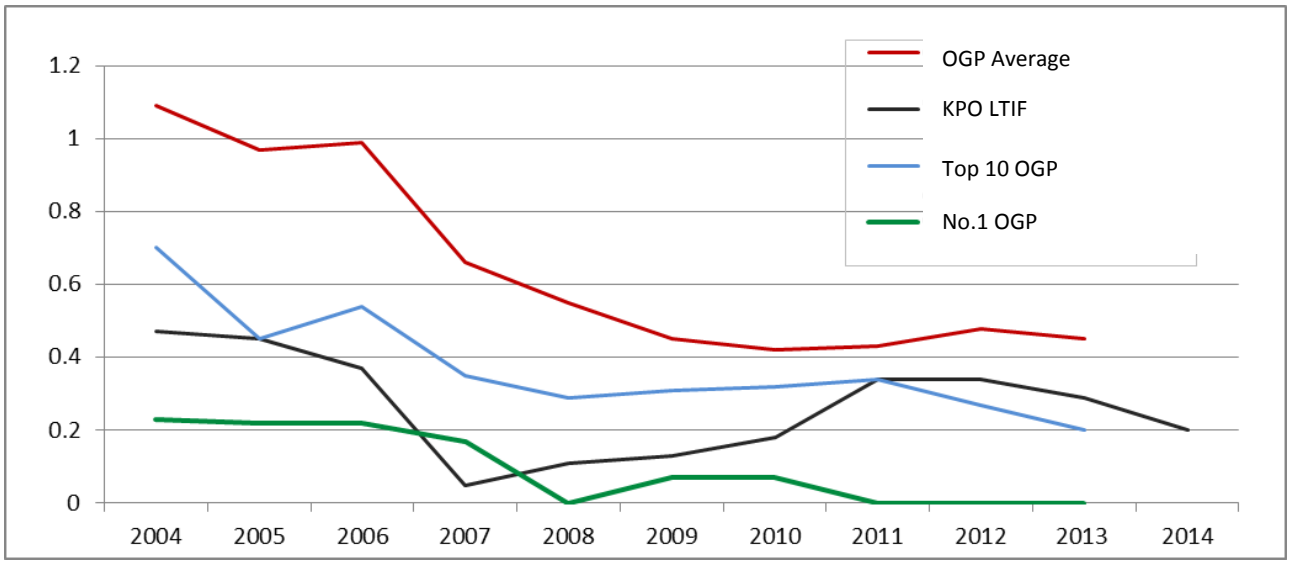
** Note: First Aid Cases are not included in occupational injury calculations.*

Thanks to the Company efforts aimed at improvement of HSE indicators in 2014, the number of recordable injuries decreased by 36% (7) compared to 2013 (11), namely: there was no a single injury recorded as a result of slipping and/or falling on ice. In 2014, KPO initiated the winter safety campaign in advance and efficiently accomplished the planned corrective actions following the results of investigation of the similar incidents occurred in 2013 (4).

None of the recordable injuries was process related. Work related injuries were sustained while dealing with general services, waste disposal, road traffic incidents and equipment maintenance. Six injures involved contractors employees and one injury was sustained by KPO employee. Five out of seven injuries were with Lost Work days. In 2014, two minor injuries were recorded, which is twice less as compared to 2013; both cases required transfer to the light duties. The main causes of the injuries were inadequate work direction and defect in management system.

KPO's Key Performance Indicators (KPIs) are annually benchmarked against statistical data which is reported to the International Association of Oil and Gas Producers (OGP) by many worldwide exploration and production operators. The number of Lost Time injuries in KPO noticeably decreased in 2014 and the overall KPO LTIF remained below OGP average indicator as shown in Graph 2.

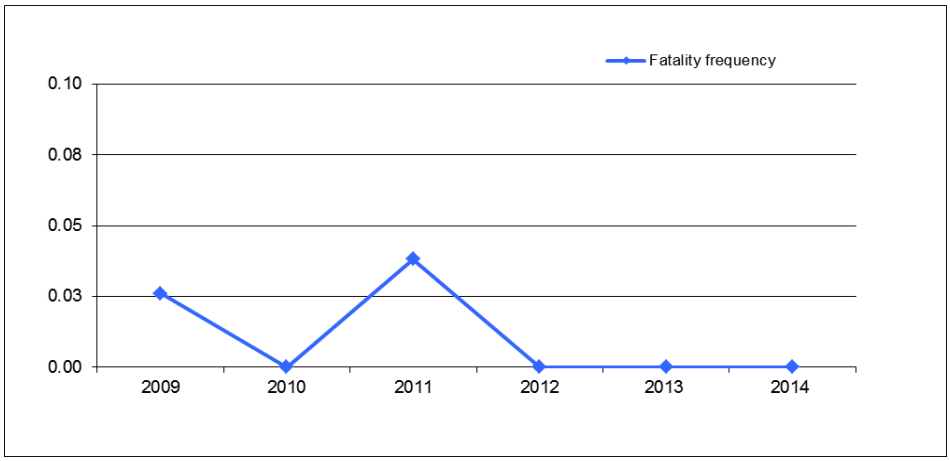
Graph 2. KPO Performance vs OGP



Legend explanation:
The International Association of Oil and Gas Producers, OGP, has been collecting safety incident data from its member companies globally since 1985. Data of OGP statistical average indicators, top 10 OGP and No. 1 OGP indicators are taken from the official annual reports presented on the official OGP website www.iogp.org;

No.1 OGP is the best LTIF performance indicator among the oil and gas producers

Graph 3. Fatality Frequency: KPO and Contractors



The following method is applied in KPO for calculation of fatality frequency:

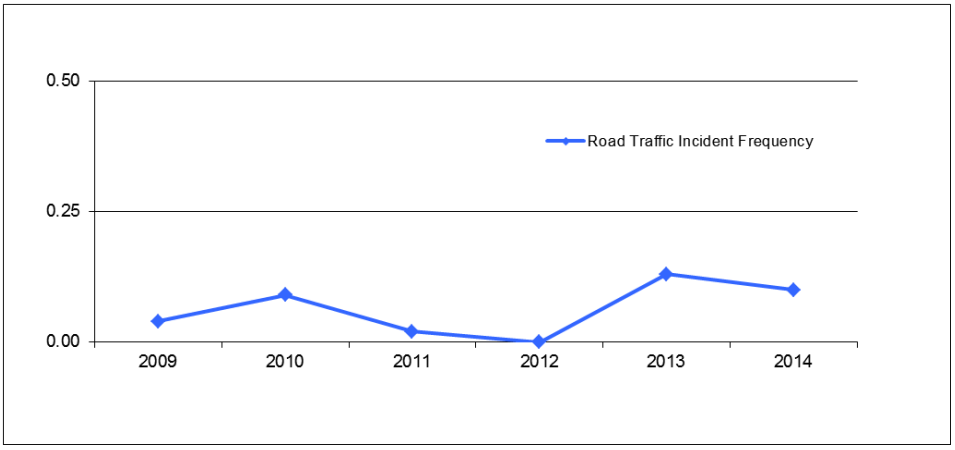
- Fatality frequency (per million man-hours worked) =Number of fatalities x 1,000,000 / man-hours worked.

Table 7. Fatality Frequency: KPO vs Contractors

Performance Indicator	2009	2010	2011	2012	2013	2014
Fatality Frequency (KPO)	0.00	0.00	0.14	0.00	0.00	0.00
Fatality Frequency (Contractors)	0.03	0.00	0.00	0.00	0.00	0.00

Road Traffic Incident Frequency (TRIF) per million kilometres driven decreased from 0.13 in 2013 to 0.10 in 2014.

Graph 4. Road Traffic Incident Frequency: KPO vs Contractors



The following method is applied in KPO for calculation of TRIF:

- Road Traffic Incident Frequency = Number of RTI (recordable) x 1,000,000/kilometres driven

Table 8. Road Traffic Incident Frequency: KPO vs Contractors

Performance Indicator	2009	2010	2011	2012	2013	2014
Road Traffic Incident Frequency (KPO)	0.12	0.13	0.00	0.00	0.00	0.00
Road Traffic Incident Frequency (Contractors)	0.03	0.09	0.02	0.00	0.14	0.10

HSE PLAN FOR 2014

Annual KPO HSE Plan for 2014 consisted of six key directions defined as critical to the improvement of safety performance within KPO. The Plan considered 4-year Strategic HSE Plan for 2013-2016 and recommendations from Parent Companies audits as well as external and internal audits. In addition, 2014 HSE Plan included variety of programmes and initiatives aimed at improvement of personnel HSE awareness, such as "KPO in Safety" programme implementation, delivery of Quarterly HSE awareness campaigns for office personnel and hazards awareness workshops.

Over the reporting period, KPO completed 97% of actions included into HSE Plan for 2014. The actions not fulfilled completely in 2014 due to the budget and resources restrains were transferred to the 2015 Plan. Core activities of the 2014 HSE Plan are summarized below:

I. Compliance with HSE Management System Requirements

With the aim of maintaining and continuously improving HSE Management System, a project was accomplished on enhancing of HSE Procedures Awareness among KPO Level 0-4 Management staff. As part of this project the HSE Procedures Matrix was developed and issued for use, followed by roll-out presentations in each Directorate.

To improve personnel awareness of Company's HSE Performance notice boards and displays were installed at all facilities and in key areas throughout the company.

In 2014, the work on bringing key contractors transport into conformity with Company's requirements continued. About 300 contractors' vehicles were fitted with in-vehicle monitoring systems.

II. HSE Leadership & Supervision

Implementation of the Line Supervisor HSE Competency Enhancement Programme was continued in 2014. Further to the Safety Training and Enhancement Programme conducted in 2014, a training course was designed and delivered covering 4 out of 10 HSE competence assessment elements wherein most of the gaps were identified in 2013.

In 2014, PaCo Eni representatives conducted workshops for KPO Level 1-3 Management staff as part of "KPO in Safety" Programme. This Programme demonstrates role of a leader in HSE and aimed at improving safety culture of employees.

III. Process Safety & Risk Management

In following up with implementation of minimum requirements to each element of Process Safety and Integrity Management Program a risk management framework was developed and implemented in 2014. It aims to provide the process for the management of Health, Safety, Environmental and Business risks using a unified and consistent approach across KPO. The procedure defines the necessary steps involved in the selection of an appropriate Risk Assessment Methodology based upon risk potential and contributing factors associated with the process changes or modifications or activities being considered as part of the KPO Management of Change Process.

In 2014, the following safety enhancement projects have been progressed as a result of the Karachaganak Field Wide H_2S emergency response study carried out in 2013:

- Well H2S Detection & Strobe Light Project;
- Vehicle Communication Systems and Traffic Lights Project;
- Global Positioning System Project;
- 'Personnel on Board' Control System Project;
- Gas Protection & Respiratory; and
- Field Minimum manning project.

As part of the programme on Major Accident Hazards (MAH) Awareness enhancement KPO held a training session in Spadeadam test facility in UK in January 2014 attended by Regulatory representatives and KPO Management. Three MAH awareness sessions were held for Level 3-4 supervisor in November-December. Further work on MAH awareness will continue in 2015.

IV. Contractor HSE Management

In 2014 Contractor HSE Performance Management Strategy was issued. The Strategy describes a system of the required measures for efficient contractor management at each stage of contract life cycle (starting from preliminary qualification phase until contract close-out phase). The Strategy indicates roles and responsibilities of the parties within the process as well as references to the appropriate procedures and guidelines relevant to Contractor HSE Performance management. Contract Owners shall ensure that this strategy is applied to all of its contracts in proportion to the set HSE risk.

Contractor HSE Performance is managed by mitigating the risks, setting HSE performance criteria, monitoring and reporting HSE performance and using this information for continuous development and feedback into the process of contractor selection.

In respect of any high and medium HSE risk contracts KPO sets a number of mandatory HSE requirements to adhere as set out in the Schedule D to the contract. This Schedule is an integral part of awarded contract and is subject to mandatory compliance by the contractor and its subcontractor while conducting works on KPO premises or units.

V. KPO Environmental Performance

In order to identify new opportunities of greenhouse gas emissions (GHG) reduction preliminary studies were delivered and the long term GHG reduction plan for 2015-2020 was developed. The purpose of the plan is consistent decrease of GHG emissions at KPO in line with the requirements set

by international and RoK regulations, parent companies and company's internal policy. The plan describes the process of collecting and reviewing data on potential projects aimed at decreasing GHG emissions resulted from company's operations, procedure of selecting acceptable projects and monitoring their progress.

In 2014, upon an initiative of Corporate Environment Paper use reduction campaign was launched in all KPO departments and units. All employees were requested to follow recommendations on efficient use of paper through selective printing and using electronic version of files for preview. As part of this campaign "Best environmental proposal: Paper use reduction" environmental contest was held. The quantity of printed/copied sheets of paper at KPO was 7,492,113 in 2014, which is less by 21% vs 2013. Other environmental protection achievements as per the mentioned HSE Plan 2014 are described in the "Caring for the Environment" section of the Report.

VI. Health Performance

As part of annual HSE Plan for 2014, Health Department has accomplished a number of actions under Occupational Hygiene Programme agreed and approved by the Regulatory Authorities. It included health risk assessment of field-based employees, preventive check-ups of the field personnel (100%) and office personnel (30%); delivery of campaign on prevention of spine and heart diseases and health education programme for Aksai schoolchildren.

2015 HSE IMPROVEMENT PLAN

Annual HSE Improvement Plan for 2015 was developed on the basis of similar principles and targets as it was in the previous plans. Development of 2015 Plan was built upon detailed review of successes and failures taken place while implementing 2014 HSE Plan, internal and external audits conclusions and the results of programs and initiatives accomplished in 2014.

Similarly to 2014 Plan, KPO HSE improvement Plan for 2015 sets actions that are over and above the day-to-day business activities, identifying clearly which Directorates are required to be involved, individual actions as well as their contribution to the company wide projects. Due to the long-term nature of the initiatives being implemented in KPO, the Plan's overall structure has not changed significantly, thus including the following elements:

I. Compliance with HSE Management System
II. HSE Leadership & Supervision
III. Contractor HSE Management
IV. Asset Integrity & Risk Management
V. Occupational Health
VI. Environmental Management
VII. Road Safety Management
VIII. Project HSE Management

Two new elements on Road Safety Management and Project HSE Management were included into the 2015 Plan to raise a profile of HSE improvement initiatives.

As in 2014, progress of the HSE Improvement Plan will be monitored and reported on a monthly basis to KPO senior management and Parent companies.

HSE ENGAGEMENT AND COMMUNICATION

With the goal of further improvement of safety culture and effective management of information the displays were installed in the field administration buildings and canteens as well information boards at operational units to display HSE Key Performance information. This helped to promote awareness and involvement of the company's employees to the overall achievement of HSE performance targets. In total there were 16 displays installed in the buildings and 10 outdoor notice boards at the entrances to process areas.

To enhance HSE awareness of the office personnel, quarterly campaigns on such topics as winter safety, office safety, road safety and HSE Cards Programme were developed and rolled-out. Within 2014 the roll-out presentations were delivered for all company's employees and the information was discussed at routine safety meetings.

HSE meetings are regularly held at various levels in the company to discuss HSE topics and concerns and to share lessons learnt from incidents investigation. We engage our contractors in our meetings and discussions related to HSE. Over half of the KPO workforce (56%) participated in formal health and safety meetings with management in 2014.

To engage the contractors in an open communication HSE Forums aimed at improving communication and sharing experience and lessons learnt are held. In 2014 two Contractor HSE Forums were conducted to promote their awareness of the Supervisor's Role in ensuring a safe workplaces and their HSE competence. The Contractor Companies Managers signed the Pledge on their Personal Commitment to HSE assuming responsibility to undertake assessment of Supervisors HSE Competency by the middle of 2015.

Regular HSE Leadership Tours conducted by KPO senior management, demonstrate their commitment to HSE, facilitate communication to workforce at their workplaces and encourage safe working practice. The number of HSE Leadership Tours in 2014 exceeded the set target for the year: 423 tours were conducted against the planned 350. This achievement is the outcome of the whole package of actions focused on enhancement of HSE Leadership, such as 'KPO in Safety' Programme in 2014, training on effective HSE leadership in 2012 and other.

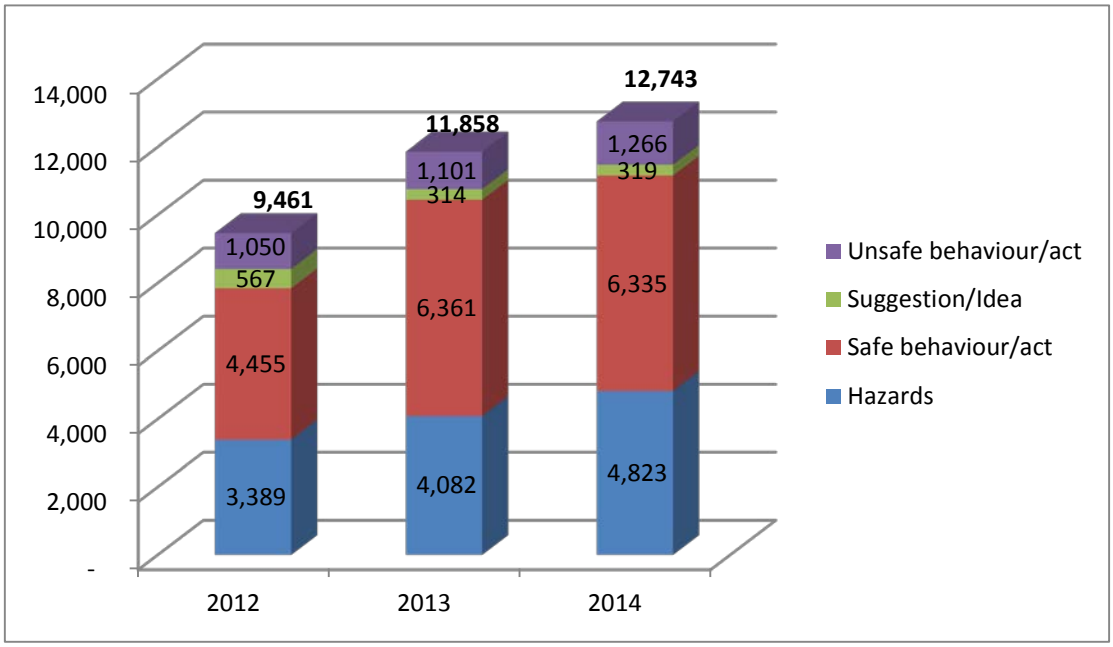
HSE CARDS PROGRAMME

HSE Cards Programme continues to function successfully within KPO. As of 2014 year end, 12,743 cards were completed and processed (of which 739 were submitted in electronic form). Based on the observations there were 6,719 corrective actions registered and 6,482 were implemented. Out of this number over 6,000 observations were reported by 36 KPO contractors actively participating in this programme.

An increased number of cards submissions are seen in 2014 in comparison with previous period. Graph 5 shows analysis by 4 types of observations in 2012-2014.

More detailed description of this programme was provided in KPO Sustainable Reports for 2013 on page 38-39 and 2012 on page 34.

Graph 5. Analysis of HSE Cards by type of observations



As part of the incentive scheme over 400 KPO and Contractor employees were awarded with promotional gifts for active participation in the HSE Card Programme. About 40 employees were rewarded with monetary prizes for the best observations based on the quarterly results.

Upon results of 2014 Unit 3 Committee was recognized as the best HSE Cards Committee out of 12 Committees functioning in KPO. Three KPO employees become BG-Group Golden Hard Hat Winners for making high quality observations and displaying extraordinary safety commitment along with outstanding behaviours and ideas. One of the nominees, Vasiliy Kozlov, Kaztransoil Instrument Engineer, was recognized for proposal to install additional ball valves onto Atyrau Terminal OPS pulse tubes in order to prevent oil spills and reduce time spent for the pulse tubes purging, which was acted upon by unit management.

The HSE Cards Programme has been actively promoted throughout the year by both HSE Teams and Company Management in order to raise awareness of the employees and improve the programme. In its turn the HSE Cards Committees at Units were working on improving the process of observations review and corrective actions taking.

Early 2014 HSE Card Programme opinion survey was launched among KPO and Contractors personnel to evaluate the effectiveness of the HSE Cards Programme. 1,395 persons participated in the survey, while 90% of respondents positively assessed the programme influence on safety practice in KPO. At the same time, the survey enabled to reveal areas for further improvement, to e.g. training materials, feedback system and company management's commitment to the programme.

During 2014 training materials were updated and over 200 new observers were trained. 50 presentation sessions were held involving 1,117 office employees in order to raise awareness of office personnel on HSE Card Programme. In addition, the committee members and cards registration specialists were trained how to use the Synergi database.

Case 1 on the incentives below demonstrates the importance and effectiveness of the HSE Award Incentive Scheme.

Case Study 1: HSE Award Incentive Scheme

Aim

Acknowledgement of efficient management, HSE achievements, innovative ideas, and effective observations both by the company's and contract organizations' employees.

Approach

HSE Award Incentive Scheme has been successfully implemented within the company since 2007. KPO encourages and motivates each employee to always demonstrate positive HSE behaviour to achieve a healthy culture in the company, as well as the growth of other important performance indicators. One of the tools of such incentives is the promotion and recognition of employees, corporate contests among the Company's and contractors' employees. Positive behaviour in HSE is encouraged by awards that get wide publicity inside and outside of the company. During consideration of the nominees for the promotion and award HSE behavioural accountability model is used, and also each case is evaluated according to certain criteria.

Result

During 2013-2014 tendency of increase in number of HSE observations and proposals was observed, whilst the number of submissions to participate in various contests vary from 12 to 48. The effectiveness of the programme is confirmed by the results of the internal and external audits held in the company. An improvement of HSE performance indicators is seen as well an improved awareness among the company employees as compared to the previous periods. The reports state that KPO has a robust process in place for communicating information, including campaigns to promote environmental awareness, HSE programmes, and employees' recognition and rewarding. The incentive award scheme is applied to personnel at all levels of the company.

EMERGENCY MANAGEMENT

KPO ensures the preparedness of the company resources to respond to a potential emergency with short and long-term aftermath, as well as its capability to establish and implement effective business contingency planning. A three-level Emergency Response Structure is being followed and each level reflects the respective level of response, responsibility and support depending on emergency escalation in the company.

Level III: An event that is beyond the resource capabilities of the location and requires activation of the Crisis Management Team to provide additional resources and support or an incident that has the potential to escalate such that there may be damage to the company reputation.

Level II: The emergency's impact remains limited within the site but there might be a potential external impact that necessitates the use of public emergency services or resources of other organisations.

Level I: An event that can be dealt with on site or at a location with their resources.

In 2014 in order to improve the command and control in emergency response in Karachaganak, a series of specific trainings were delivered to dedicated Incident Management Team (IMT) and Crisis Management Team (CMT) members as well as Crisis Communication training for assigned Corporate Communications responders.

As part of 2014 Level II-III Emergency Response (ER) Training and Exercise Plan, a series of table top scenarios and exercises were conducted:

- Integrated exercise that involved all levels of the KPO ER Organisation and CMT's of Operators Companies (exercise INDIGO);
- Integrated exercise between level II and III (exercise JUPITER)
- Integrated exercise between level I and level II related to oil spill response;
- Weekly table top exercises to brainstorm various scenarios with Aksai and Field Incident Management Teams.

ASSET INTEGRITY MANAGEMENT

Table 9. Our targets in Asset Integrity

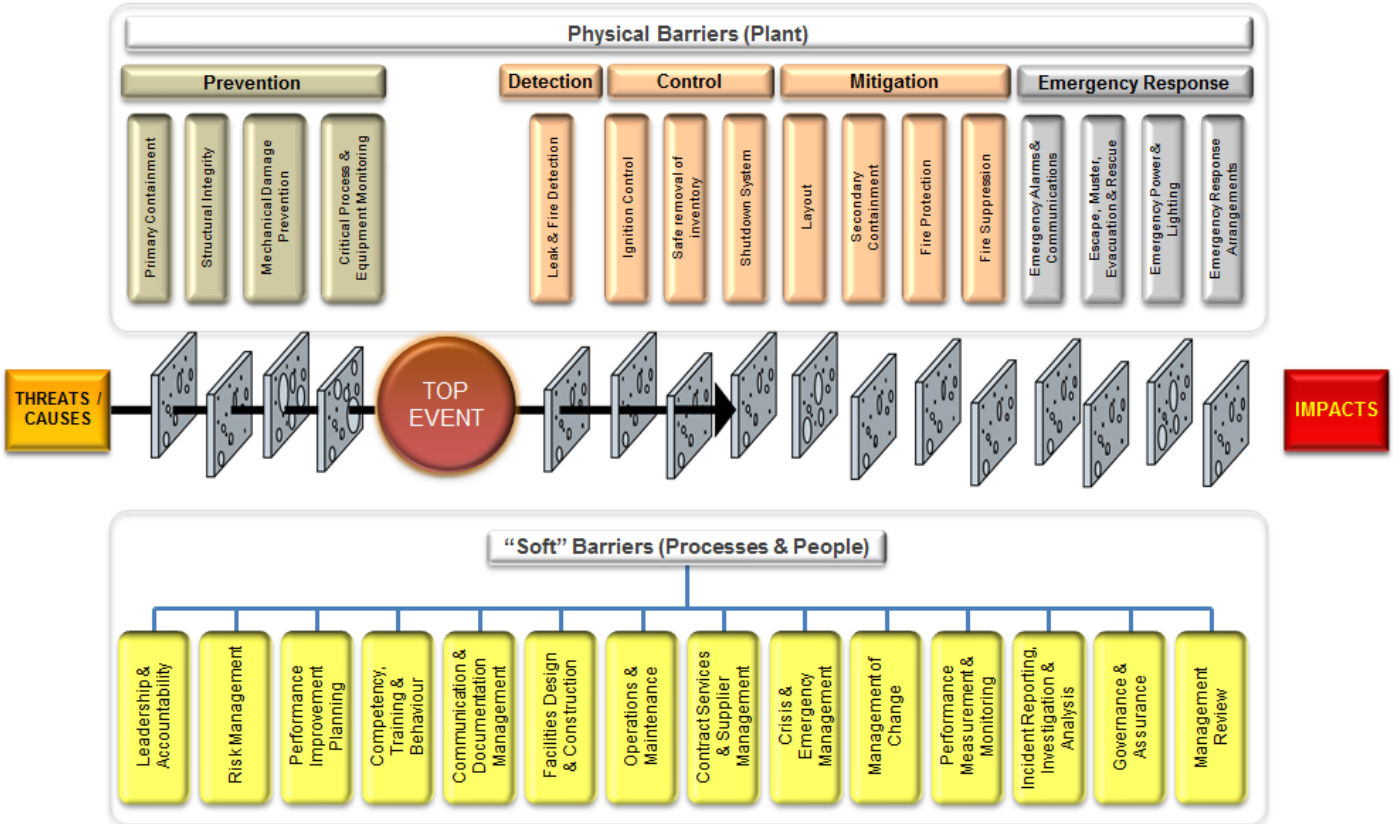
Our 2014 targets	Target achievement	Actions taken in 2014	Targets for 2015
Continue to refine the RBI and inspection programs to reduce the LOPC events	No	Risk based inspections are an ongoing activity within the P&M inspection and maintenance program. Number of losses of primary containment was within the limits established in the key performance indicators.	Continue to refine the RBI and inspection programs to further reduce the LOPC events
Initial Independent Verification of safety critical elements and performance standards	Yes	The preliminary Independent Verification has been conducted by an internationally recognised organisation.	Conduct an Independent Verification to confirm Unit 3 status
Asset Integrity Management Framework preparation	Yes	Asset Integrity Management Framework has been prepared.	Arrange quarterly meetings of Asset Integrity Management Committees
	New target		Implement Barrier Model and Operational Risk Assessment for the assets, and relevant Integrity improvement plan

The active and robust management of the functional, mechanical, and operational integrity of the complex, capital-intensive assets such as found within KPO's Karachaganak Field is fundamental to the long-term sustainability of KPO's business.

As KPO's operating assets transition into the second half of the design life cycle, the asset integrity management becomes more central to its vision of a sustainable business. In recognition of this transition, the Directors of KPO have initiated a programme for embedding the core principles of asset integrity and process safety management across the organisation.

Asset Integrity is associated with managing the risk from major accident hazards and, at the same time, ensuring that the asset can perform its operational function effectively. Based on the framework applied throughout the organisation, achieving the Asset Integrity requires that suitable protection ***Barriers*** are set up, and that their ongoing suitability is managed throughout the asset life cycle. It is important to realise that the occurrence of a Major Accident requires the failure of one or more physical Barriers (**Plant**), often within complex scenarios. The asset integrity barrier model concept is presented below.

Pic.3. Asset Integrity Barrier Model



International experience from large accidents demonstrates that the existence of the physical Barriers is not, in itself, sufficient to prevent Major Accidents. The effectiveness of the physical Barriers is dependent upon

numerous underlying “soft barriers”, such as well managed organisational practices (**Processes**) as well as individuals’ and teams’ competencies (**People**). The combined effectiveness of all of Plant, Processes and People is essential at every life cycle stage in achieving the initial provision and ongoing suitability of the Barriers.

In 2014 KPO commenced introduction of this Barrier Model to manage asset integrity to best available international practice. The model was summarised in the Asset Integrity Management Framework. The framework sets the following objectives:

- Set out the structured approach to the successful delivery of the KPO strategy for safe and sustainable operating performance as an integral part of the business risk management process, and;
- Reduce major accident hazards to people, environment, asset damage and Company reputation.

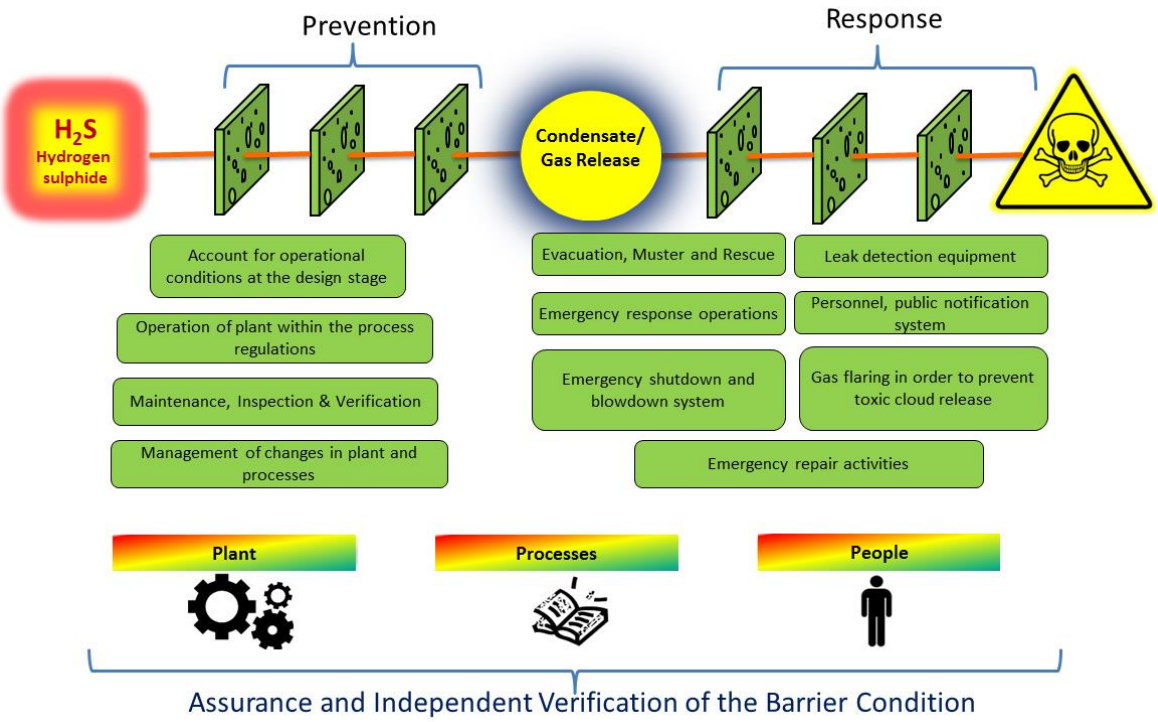
This will be achieved by providing the relevant methods for the Asset Integrity Management which include but are not limited to:

- Asset Integrity Barrier status;
- Procedures for Safety Critical Elements Management, as well as determination and functional assessment of their performance standards;
- Operations risk assessment methods;
- Management of Change system

While some of the above-mentioned processes already have existed in KPO for several years, what makes the asset integrity management approach advantageous is how it places the appropriate focus on the most critical issues. The principles articulated in the Asset Integrity Management Framework (AIMF) are directly connected with ‘corporate culture change’. Therefore the Asset Integrity Department efforts are focused on both implementing management system processes as well as provide awareness of those processes across all KPO Directorates.

Application of the Barrier model can be demonstrated through the example of hydrogen sulphide, as one of the major accident hazards. The illustration in picture 4 is provided as a demonstration only and should not be considered as an exhaustive description of hydrogen sulphide risk control measures.

Pic. 4. Barrier model illustration by the example of H_2S as a Major Accident Hazard



In 2014 the main efforts in improvement of Asset Integrity barriers were associated with:

1. Management of Safety Critical Elements as physical barriers protecting against major accident hazards.

   Safety Critical Elements (SCE) incorporate any part of the process installation, including software, failure of which can cause or make a significant contribution to a major accident. The purpose of SCEs is to prevent, control or mitigate major accident hazards. The KPO activities in 2014 involved gap analysis of the existing system in place for management of safety critical elements, including methodologies for identification of these SCEs, development of performance standards and determination of test frequencies for SCEs. A preliminary Independent Verification has been conducted by means of an international recognised organisation. Work will continue in 2015 in order to implement the suggested improvements;

2. Development and Introduction of the Electronic Management of Change (MOC) system for brownfield modifications.

   The work started in 2013 was finalised in 2014 and as of January 2015 a new electronic management of change system was introduced in KPO in order to simplify the data processing and enable more efficient approach to MOC approval process.

3. Continued implementation of the requirements of the Process Safety and Integrity Management (PSIM) Standard.

   KPO made a decision to integrate the existing process safety and integrity management standard within the asset integrity management framework in order to ensure consistency of what was achieved in the past with what will be implemented in the future. For this purpose, the implementation of the requirements defined in the PSIM Standard continued in 2014. The 2014 year end progress of actions completion was 60%. Further activities within the PSIM Plan will be continued in 2015.

4. The introduction of the Asset Integrity Barrier Model, presented in picture 3, is a central part of the Asset Integrity Management Framework.

   KPO has commenced with the introduction of a simplified barrier model as a dashboard for each production facility within the Karachaganak field. This helps to highlight important process safety and integrity issues to senior management and prioritise risk reduction measures in order to maintain the health of the main major accident hazard protective barriers identified by the Company. This work will be continued in 2015.

The vision of the KPO senior management team is clear – a robust asset integrity programme is central to the long term sustainability of KPO's business. To achieve this programme, the initiatives described above will continue in 2015 with further enhancements and be made available to a wider audience. The Asset Integrity Department will continue its focus on providing functional support and asset integrity assurance across the KPO assets and the projects.

OCCUPATIONAL HEALTH

Management of health issues of the personnel engaged in the oil and gas industry requires the system that would provide access to the primary and secondary health care and emergency medical assistance. In addition, it is required to have expertise in the sphere of occupational health to be based upon systematic approach to preservation and improvement of medical care quality within the frames of public health system.

Table 10. Our targets in occupational health

Our 2014 targets	Target achievement	Actions taken in 2014	Targets for 2015
Implement the Healthy Heart Program; Monitor health of the cardio disease high-risk group and perform preventive actions.	Yes	Individual health improvement plans have been developed for risk group employees. Health promotion activities, obesity prevention were carried out throughout the year: posters, leaflets, presentations, bulletins. Allen Carr Easy Way to Stop Smoking course was organised and 38% of smokers quit. The 2-year data analysis shows a decrease in cholesterol levels.	• Continue the Healthy Heart program; • Review and adjust individual health plans for risk group employees; • Focus further health promotion on hypertension, physical activity and medical screening; • Continue the Allen Carr Stop Smoking course.
Conduct HRA for the next 30% of the positions; continue the monitoring of corrective measures done in 2013	Yes	The plan was completed by 100%. The corrective actions completion was tracked in Synergi database.	• Conduct a review of the 2014 HRAs; • Carry out additional HRAs for critical positions in the field; • Conduct a focused HRAs for activities with high and medium risk rating.
Implement the Program of sanitary and hygienic monitoring of workplaces developed for 2014 and agreed with regulatory authorities	Yes	The Sanitary compliance monitoring was completed in accordance with the program approved by the regulatory authority.	• Continue compliance monitoring in 2015; expand the scope of work to include more factors (chemical hazards). • Purchase new equipment to upgrade sanitary laboratory's capacity.

KPO Health Department continues to provide a reliable and qualified service to KPO employees and their dependants. Among its main functions are:

- 24/7 emergency medical care and pre- and post-shift medical check-ups;
- Primary health care at workplaces;
- Health risk management;
- Industrial hygiene and control of workplace exposures;
- Drinking Water and Food Safety Quality Control;
- Fitness for task assessment and health surveillance;
- Medical insurance;
- Interaction on issues of public healthcare and promotion of healthy lifestyle.

24/7 Emergency Medical Care

KPO Medical Support team provides emergency medical care to company employees from on-scene first aid to medical evacuation and repatriation through five fully equipped clinics functioning around the clock throughout the year. They have regular and all-terrain heavy ambulances equipped as resuscitation units.

In 2014 the medical personnel have been trained on international Advanced Cardiac Life Support qualifications. The emergency preparedness is maintained through regular drills and exercises.

Medical support section has an agreement with several hospitals in Uralsk and Orenburg (Burn Injuries Treatment Centre city hospital #4). In 2014 the management of the Medical support team met with management of the two major Orenburg hospitals on the subject of temporary hospitalization in case of medical repatriation of patients – employees of the company via Orenburg.

Taking in account the intensive traffic of the company vehicles on the route of Uralsk, Atyrau, Aktobe, Orenburg and Samara destinations, the Medical Support team started an analysis of the state medical support services of these roads. In 2014 the analysis was done for Uralsk, Orenburg and Samara destinations with visit to all the medical points located along these roads. On the basis of the results of the visits, the detailed report was issued containing data for all medical points, including furnishing with medical equipment, capacity, quantity of beds, and availability of single-discipline medical specialists for emergencies. Based on this data in cases of emergency it will be possible to coordinate the process and, depending on each emergency case, direct a patient to one or another medical facility. The analysis of Atyrau and Aktobe directions is planned for 2015.

KPO Medical Support team also provides emergency care along the 54-km Aksai - Ilek road section.

Pre- and post-shift medical check-ups

There is a legislation requirement for some categories of occupations to undergo pre- and post-shift medical assessments.

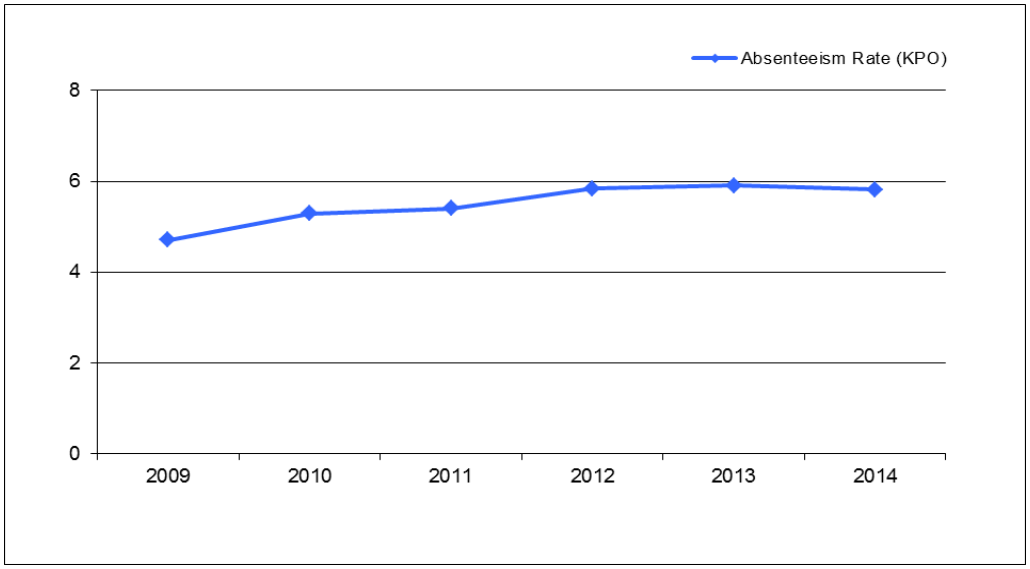
Oil and gas production operators and electricians working at the 220V or above units are subject to pre-shift medical check-up. The medical check-ups are performed by the Medical support personnel of the Health department.

All drivers working at KPO are subject to pre-trip and post-trip medical check-ups. These check-ups are performed by the personnel of the KPO Medical Support Sector and medical staff of healthcare contractor providers.

Primary health care at workplaces

KPO Medical Support clinics in the Field and Aksai providing daily medical care to company employees are the first line of managing ill health. The definitive diagnostics and treatment of KPO personnel is outsourced by way of medical insurance. The Health department monitors and analyses sickness absence among employees. Health records are maintained with respect of medical confidentiality as a fundamental principle of patient care.

Graph 6. KPO Absenteeism rate



To calculate the above-stated Absenteeism rate in KPO, the following method is applied:

- *The absenteeism rate = actual number of days lost due to absence in the workplace (because of illness) x 100 / total quantity of workers. Data of days missed for other reasons is not available.*
- *Calculation method for absenteeism adopted in KPO is based on the number of employees (not man-hours) as required by regulatory authorities.*

KPO employees' sick rate situation is stable. In 2014 there was some insignificant decrease in number of disability cases compared with the previous year.

Management of Health Risks

Health risk assessment (HRA) is the primary responsibility of the line management. A job-group approach to assessing health risks has been adopted in KPO and this process is carried out by designated teams consisting of representatives of line management, HSE and Occupational Health and Hygiene Section.

Results of the HRA are communicated to staff and action plans are implemented to manage risks. The action closure is tracked down in the Synergi database.

The most hazardous factors, like explosion and fire hazards, poisoning with hydrogen sulfide, high and low temperatures, caustic chemical agents, electric current shock, transport, moving and rotating mechanisms, food toxic infections, wild animals, are controlled by efficient protection mechanisms, which include HSE control system corresponding to OHSAS 18001 standard, compliance with strict requirements to equipment integrity and system of collecting and transporting products and their regular maintenance, personnel training, operation mechanization, using a system of work permits, permanent monitoring of hazardous factors, emergency response plans, check-ups and audits, using personal protection equipment and others. As a consequence, exposure of KPO personnel to those risk factors is brought to minimum.

The example of substantial health risk at KPO is in-plant noise exposure. In this relation the company has introduced a Hearing Conservation Program.

Case Study 2: Hearing Conservation Program

Aim

Decrease the in-plant noise exposure of the workers and prevent development of occupational deafness

Approach

The reliable protective mechanisms at facilities with high noise level were created in the Company, namely:

- The 'Buy Silence' policy has been implemented, which stipulates mandatory requirements to the choice of equipment, which would have minimal noise generation
- Preventive maintenance of equipment with replacement of worn parts in the noise generating equipment is conducted at the units.
- The issue of noise risk is included in HSE briefings at all production facilities.
- Noise maps are updated and placed at all facilities.
- Warning signs available at all facilities with high noise level.
- 'Protection by time' is the limitation of personnel exposure at noisy sections.
- There is the choice of personal protective equipment. The use of the equipment in noisy sections is mandatory.
- All Program elements are checked during regular audits.
- Awareness and responsibility of direct management and lower level personnel is increased.

Result

No cases of hearing loss caused by noise have been detected since 2012.

Sanitary and hygienic monitoring of workplaces

Statutory workplace monitoring is one of the functions of the Sanitary Laboratory, an in-house industrial hygiene service. The measurement results are used to identify non-compliances with industrial hygiene norms and to implement corrective actions. As KPO is committed to setting a high standard of workplace exposure control, continuous improvement of the Sanitary Laboratory's capabilities has been a priority for the Health Department.

Sanitary and hygienic monitoring consists of measuring the hazardous substances concentration in the air of the working area and measuring physical factors. In 2014, 13,845 measurements of workplace air were performed; the results of all measurements did not reveal any discrepancies from norms.

Based on the results of physical factors measurement shown in Table 11, out of 13,242 measurements of physical factors, 1,260 did not meet the standards.

Table 11. Results of physical factors measurement in 2014

Physical factors	Number of samples, total	Number of samples not corresponding to MPL*
Noise	430	98
Vibration	120	13
EMF*	3,768	51
ESF**	1,988	0
Lighting	2,424	770
Microclimate	4,512	328
Total	13,242	1,260

Notes:

** MPL – maximum permissible limits*

***EMF – electromagnetic fields*

****ESF – electrostatic fields*

The corrective measures taken throughout the year against discrepancies to the maximum permissible limits included the following factors below.

Electromagnetic fields:

To determine the reasons of EMF high levels, the check-ups of all workplaces with involvement of electric maintenance services were performed. The availability and quality of electric contacts between grounding units of sockets, additional means of connection (extensions, power supply filters, etc.) and plugs of main cables of connected electric units. Based on the results of check-ups the measures for elimination of the revealed defects were followed by instrumental control of corrective actions efficiency.

Lighting:

- The current lighting plant was reviewed with involvement of appropriate experts (to study efficiency of the current unit, assessment of lighting devices positions, type and capacity of the sources used).

- Based on the results of the performed studies, the Infrastructure & Services Department was given recommendations concerning improvement of artificial lighting of workplaces.
- The appropriate services perform updating of the lighting system at facilities: the process of step-by-step replacement of luminescent lamps by the sources with higher luminous efficiency (LED lamps).
- At some facilities the luminescent lamps with expired period of operation were replaced (luminous efficiency of luminescent lamps decreases proportionally to the number of hours worked out).
- Insufficiently lighted workplaces were equipped with additions sources of local lighting.
- It was recommended to rationally arrange workplaces taking into account the position of sources of natural and artificial lighting.

Microclimate:

- The process of heating control in premises was adjusted;
- The time of the personnel staying within production sites was regulated;
- Personnel heating premises were organized;
- In cold times the personal protection equipment was provided;
- Daily wet cleaning and airing of premises are performed.

Drinking water quality control and food safety

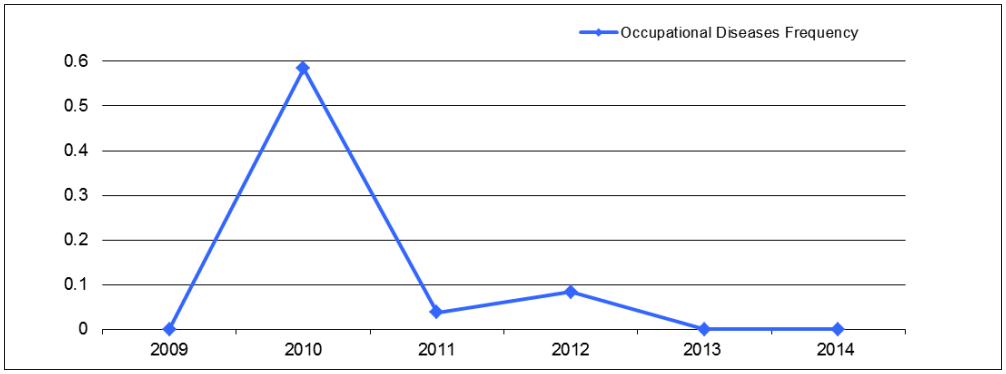
Breakouts of food poisoning and diseases transferred through water are the substantial risks to health, production and company reputation. The programs of monitoring food safety and drinking water quality continued at KPO throughout 2014. Over 920 water samples were analysed by a contractor laboratory, with 99.7% compliance rate. In 2014, the Health and Hygiene section team performed over 50 inspections of canteens, and over 75% of recommendations were fulfilled. Inspections did not reveal serious violations of food safety rules. They mainly were related to lighting, microclimate, technical condition of the equipment (defects of sealing in cold storage rooms, cabinet ovens, racks with impaired integrity and painting defects, etc.) Their elimination requires substantial capital investments and time.

Fitness for task assessment and health surveillance

The purpose of a fitness for task assessment is to ensure proper placement of prospective employees in job positions that will match their capabilities without risk to themselves and co-workers. It also provides a baseline or benchmark information, which will be used as a reference when evaluating the workers' health status during consequent check-ups. The latter is especially valuable for an identification of possible occupational diseases.

All KPO workers undergo obligatory medical examination when employed. Annual regular medical examinations cover almost 1900 persons working on the oilfield. The office employees, who are not subject to obligatory annual medical examination, are proposed to undergo medical screening. The screening purpose is to determine the personnel's health condition and define various diseases' risk groups. Periodicity of medical screening is once every three years. For the employees' convenience, the screening is conducted annually. Within 2013-2014 70% of personnel have undergone such screening.

Graph 7. Occupational Diseases Frequency - KPO and Contractors



To calculate the frequency of occupational diseases, the following approach is applied at KPO:

- Occupational diseases frequency (per million of man-hours) = number of occupational diseases x 1,000,000 / man-hours.

Table 12. Occupational Diseases Frequency - KPO vs Contractors

Indicators	2009	2010	2011	2012	2013	2014
Occupational Diseases Frequency(KPO)	0.00	2.46	0.14	0.28	0.00	0.00
Occupational Diseases Frequency (contractors)	0.00	0.00	0.00	0.00	0.00	0.00

Promotion of healthy lifestyle and social engagement on issues of public health care

Disease prevention is the important part of corporate social responsibility of our company. KPO keeps an active position in promotion of healthy lifestyle, increasing awareness on health problems and importance of preventive measures, such as vaccination, medical examination, physical exercises, healthy nutrition, struggle against alcohol and drug abuse, etc. Below is the case study on the Healthy Heart Program launched by KPO in 2013.

Case Study 3: Healthy Heart Program

Aim

Decreasing risk of occurrence and progressing of cardiovascular diseases amongst the company's employees, such as arterial hypertension, myocardial infarction, cerebral stroke, chronic cardiac insufficiency.

Approach

The scope and terms, as well as methodology for cardio risks calculation were determined. Data analysis on cardiovascular diseases probability in the nearest 10 years among oilfield employees older than 40 years revealed 716 persons with high risk, 226 of them sought medical advice.

The undertaken preventive measures and treatment included: consulting employees and development of individual plans for health improvement, topic presentations, issue of brochures, posters and other printed products, the anti-smoking course 'Easy Way to Quit Smoking'.

Result

Analysis of the employees' examination in 2012-2014 demonstrated a tendency towards decrease of risk criteria.

In 2014, 44 people took part in the anti-smoking courses, 19 of which quitted smoking, which constituted 43%.

Acknowledging the vulnerability of the young generation, the employees of the KPO Health Department conduct presentation of various topics on health protection in Aksai secondary schools. Over 200 schoolchildren of two schools participated at the presentations in 2014.

In addition, the KPO ambulances were provided on request of Aksai hospital to transport critically ill patients to Uralsk clinics. They were also engaged in transporting schoolchildren from Beryozovka village to Aksai hospital and "Akzhayik''sanatorium.

Back Pain Prevention Program

The initiative Back Pain Prevention Program was introduced in 2014 to resolve the common health problem. To evaluate the scope of the problem, Health department conducted poll for the office employees. The health condition of the personnel engaged in oilfield operation was analyzed during regular medical examinations.

	Vertebral osteochondrosis (oilfield personnel)	Herniation of intervertebral disk (oilfield personnel)	Questionnaire answers (office personnel)
Participation	447 (25% of all examined employees)	49 (3% of all examined employees)	134 (about 15% of all office personnel)

Persons with serious diseases (23 persons) are subject to regular medical check-ups and receive specialized treatment. Other groups will get individual plans with recommendations regarding their lifestyle change, labour conditions improvement, exercises and control examinations.

SECURITY

Table 13. Our targets in security

Our 2014 targets	Target achievement	Actions taken and implementation status	Targets for 2015
Ensure the Export Pipeline security	Yes	Regularly planned onsite meetings with different groups of stakeholders were held to provide clarifications and discuss issues related to the pipeline security.	Ensure zero illegal taps in the Export pipeline
	New target		Hold training on Human Rights and Security Principles for security services' provider

In 2014, KPO Security Department actively performed a number of initiatives in various directions. The most notable are steps for development of a Security Management System (SMS) into KPO and provision of all KPO contractors with unified personal badges.

The work on development and implementation of SMS is in progress. In particular, according to tender results, we have placed an order for manufacture of new security fencing along the perimeter of the main operational units in the Field to replace the current ageing chain-link fencing. We have continued to recruit staff for the Project team to implement the system.

Besides, we continue to assist our Corporate HSE in the development and introduction of an electronic system recording personnel on board and evacuation in case of emergencies in the Field. The example given below demonstrates the efficiency of the actions taken to strengthen control over the company's assets.

Case Study 4. Strengthening of access control at KPO facilities

Aim

Creation of a unified system of individual security badges for all employees, contractors and sub-contractors to reduce security risks and ensure HSE compliance

Approach

Mobilization of internal Security resources to ensure effective access control in the offices to cover over 100 contractors with a total number of more than 10 thousand employees. The activities included organization of Access Control Section in the Field, photography of employees, creation and updates of personnel databases, making badges' design and printing on electronic access cards. For such purposes, we purchased the required accessories and consumables, arranged the regular maintenance, repair and upgrade of the existing printing equipment, installed additional software, and engaged and trained additional contractor personnel to operate the equipment.

Result

100% of KPO employees were provided with updated badges. Printing of the unified badges for contractors is ongoing (90% completed by the time of this Report issuance), all main badges for visitors were transferred to electronic format. All the taken actions allowed substantially increase efficiency of access control to KPO facilities and simplify the process.

Yet again, last year we had no registered cases of illegal taps in the Export pipeline. That achievement once again demonstrates the effectiveness of all the measures taken: rigorous patrolling, efficient operation of Optasense alarm system, and scheduled monitoring of contractor's work and continued engagement with the communities living along the route of the Export pipeline.

The concepts of security and protection of human rights are interconnected as stated in the Universal Declaration on Human Rights adopted by the UN General Assembly in 1948, and also in 'International Labour Organization Declaration on Fundamental Principles and Rights at Work' adopted in 1998.

KPO management is committed to the Voluntary Principles on Security and Human Rights (VPSHR). In 2014, KPO held the training on Human Rights and Security Principles for contractor's employees providing security services of KPO assets in Aksai, in the Field and of KPO sites and facilities of KATS Export pipeline. The purpose of this training is to familiarize the security provider's employees with principles of human rights, using competent and professional approach with respect to the human rights in their daily duties.

KPO intends to continue cooperation with its partners in this area. The provision for the VPSHR training was added to the new security contracts scope of work. In this relation, the VPSHR training program for all employees was developed and included in schedules.

Potential risk of extremist activity against the Company remains our big concern. Interrelation between KPO and the RoK law enforcement authorities at the local, regional and national levels are essential for our forewarning and preparedness. Regular meetings, development of new procedures, computer based awareness training, familiarization visits followed by anti-terrorist exercises in the past year have all assisted in raising awareness in this area.

Case Study 5. Security of KATS: continuous engagement of KPO Security department with the communities, local authorities and law-enforcement bodies

Aim

Informing the communities living along the Karachaganak –Atyrau Export pipeline about the KPO operations, the importance and role of this pipeline for the Republic of Kazakhstan, the risks related to the potential incidents; establishing cooperation and collection of feedback

Approach

Arrangement of annual onsite meetings with heads of district and rural Akimats, administration and school staff, heads of district departments of Emergency and communities residing in settlements located along the Export pipeline from KPC to Atyrau Terminal, explanation and discussions of various aspects related to the KPO operations, distribution of visual aids and provision of contact data of representatives of the relevant KPO departments and services, establishing working contacts with representatives of territorial law-enforcement bodies.

Result

The performed activities facilitate the substantial mitigation of risk related to unauthorized access to the secured territory of KPO Export pipeline from Karachaganak to Atyrau, prevention of infringements related to offences against the Company's property and general improvement of crime rate in the areas of the pipeline adjoining facilities. These actions together with the alarm system along the entire pipeline length, and robust patrolling by mobile teams of the security service contractor in 2014 contributed to prevention of any illegal taps at this strategically important facility.

Environmental protection in the technically complex Karachaganak field is a challenging task as it involves managing high toxicity and inventory of hydrocarbons, high gas utilisation ratio and high operational risks to mitigate and minimize impacts of flaring. To support global efforts aimed to minimize climate change, KPO applies world-class methods and innovative technologies to protect the environment in the region where it operates.

Table 14. Our environmental targets

Our 2014 targets	Target achievement	Actions taken in 2014	Targets for 2015
Achieve reduction of greenhouse gas emissions by 201 thousand tonnes of CO_2-equivalent	No	In 2014 the actual volume of GHG emission reduction was 193,289 tonnes of CO_2- equivalent.	Achieve reduction of greenhouse gas emissions by 199 thousand tonnes of CO_2-equivalent
	New target		Ensure that specific GHG Emissions do not exceed 14 tonnes CO_2 per Mboe
	New target		Ensure that the throughput losses do not exceed 3.82%
Conduct a Certification audit to verify compliance of the KPO's Environmental Management Systems with the requirements of ISO 14001	Yes	Re-certification audit to ensure EMS compliance with the requirements of ISO 14001 was successfully conducted.	Conduct a Surveillance audit for compliance of the KPO Environmental Management Systems with the requirements of ISO 14001
Complete the works on the field Water treatment plant upgrade project	No	Oily water separator was installed at the KPC Water treatment facility. State Acceptance Commission was held on 20.10.14. Acidification Plant was constructed within the territory of the Water treatment facility. Commissioning is ongoing.	
Complete modification of the Waste Segregation Unit and put it into operation	Yes	Waste Segregation facility was put into operation by State Commission on 25.04.14. Additionally, to improve and upgrade the Waste Segregation Facility, the works for installation of metal cylinders pressing equipment were carried out.	

Continue laboratory researches to study the methods of using the mud-laden fluid after it is processed by TCC and RKI	Yes	Over the year of 2014, the following activities were completed: • Preparation for pilot tests to identify whether carbon cuttings may be used for road construction; • Preparation for pilot tests to identify whether the carbon cuttings may be used for WKO tree-planting projects; • Creation of a pilot mineralized tree belt in the West-Kazakhstan Oblast (WKO); • Laying a pilot roadside segment on the WKO road.	
Continue utilisation of wastes from cells 3 and 4 designed for storage of solid waste and spent drilling muds	Yes	About 6,823.3 tonnes of waste accumulated at the "Solid waste and spent drilling mud disposal site" were treated by the Eco Centre facilities in 2014.	
	New target		Construction of four new cells at the Landfill
Implement the landscaping of the areas adjacent to KPO facilities at KOGCF and SPZ; tree-planting over the area of 33.74 ha	Yes	In addition to the previously planted 2.49 ha, the mechanized plantation of trees and bushes over the area of 31.23 ha was completed. Total area of tree planting was 33.74 ha.	Implement the following activities as part of the Work Project for Phase I Tree-planting of Established SPZ and setting out of its boundaries: • Preparation of 48 ha soil for tree-planting in 2016; • Tending of trees and shrubs planted in 2010-2014 in the area of 206 ha; • Implementing fire-prevention measures in the area of 326 ha; • Reconstruction of existing forest belts.
Conduction of scientific researches for further development of the project on removed topsoil use	Yes	Works planned for 2014 on preparation of the scope of works, approval and resolving budgeting issues were completed. Phase 1 works of the project will be commenced in I QTR 2015.	Continue scientific researches for further development of the project on the use of the removed topsoil
	New target		Update database of species based on the results of fauna monitoring at KOGCF

IMPLEMENTATION OF THE ENVIRONMENTAL PROTECTIVE MEASURES PLAN FOR 2014

Following the principles of sustainable development is a priority for KPO while conducting its operational activities.

The core KPO's commitments under the HSE policy are: reduction of adverse environmental impact, assurance of environmental protection and environmental safety. KPO makes focused efforts to ensure the principles of sustainable development, to reduce greenhouse gas emission and to conserve natural resources by introducing best available technologies.

To achieve the desired objectives and to comply with the Chapter 10 of the Environmental Code of the Republic of Kazakhstan, KPO develops the Environmental Protective Measures Plan (EPMP). The KPO EPMP for 2014 included the measures in concordance with the "Standard list of environmental protection measures" approved by the Order of the Ministry of Environment of the Republic of Kazakhstan No.162-p dated July 12, 2013.

The process of development of 2014 EPMP was regulated by the KPO's procedure "Preparation and control over fulfilment of KPO Environmental Protective Measures Plan for 2014 by the Steering Group".

Control over the implementation of the EPMP is conducted on a monthly basis. The progress reports on implementation of the EPMP intended for the Environmental Department of the Western Kazakhstan Oblast contain the information on completion of measures, the budgets spent over the reporting period, economic and environmental effect accomplished by implementation of the measures.

In 2014 KPO conducted its production activities on the basis of decisions and developed EPMP identified in the table below. The KPO EPMP for 2014 was an initial plan; the following EPMP were revised to align to the validity period of the relevant Environmental Emissions Permit.

Permissions received for 2014	**Developed and agreed Environmental Protective Measures Plans for 2014**
Environmental Emissions Permit No. 0000278 dated 31.12.2013 (actual validity: January 01 –July 31, 2014)	KPO Environmental Protective Measures Plan for 2014
Environmental Emissions Permit No. KZ21VCZ00022905 dated 01.08.2014 (actual validity: August 01 – November 27 2014)	KPO Environmental Protective Measures Plan for August-December 2014
Environmental Emissions Permit No. KZ46VCZ00024104 dated 28.11.14. (actual validity: November 28 –December 31, 2014)	KPO Environmental Protective Measures Plan for November-December 2014

At the stage of development of the 2014 EPMP, in order to agree the EPMP with the public, on June 20th, KPO conducted the Public Hearings. On June 27th, while adjusting the KPO EPMP for August-December 2014, one more session of Public Hearings was held. The EPMP and its amendments were approved by the public in both sessions.

According to the EPMP for 2014, KPO had planned to implement 30 measures focused on environmental protection, reduction of environmental emissions, air enhancement, reduction of usage of natural water, assessment of KOGCF impact on waste treatment and burial of treated waste, restoration and improvement of soil fertility, flora and fauna conservation, geodynamical, radiation and production monitoring, research on the condition of ecosystems adjoining KOGCF, improvement of environmental management system, promotion of

Environmental awareness and environmental education. Afterwards, the Plan was revised. Based on this Plan, 29 measures were approved by the Committee of Environmental Regulation, Control and State Inspection in the Gas and Oil Industry of the Ministry of Energy of the Republic of Kazakhstan. The researches on assessment of the feasibility of wastewater injection to the well during hydraulic fracturing activities and engineering for construction and arrangement of sectional staff gauge in the territory of the water reservoir Bolshoi Griffon, which were proposed to the initial draft of the Plan, were excluded due to having no approved budget to implement the measures. The measure on improvement and modification of waste segregation unit by means of installation of pressing equipment for metal containers was added into the Plan.

All 29 measures planned to be implemented in the WKO for 2014 were fully realized.

In 2014 total actual expenses for implementation of the environmental measures of all plans amounted to KZT 3,962,791,993 (equivalent to USD 21,969,346). Expenses planned for 2014 amounted to KZT 2,627,627,034 (USD 17,513,080).

Expenses specified in sections of the KPO EPMP for 2014 are shown in the table 15.

Table 15. Expenses for implementation of the 2014 EPMP

No.	Sections of environmental measures	Actual expenses for implementation of KPO measures in the WKO in 2014, KZT
1	Air conservation	560,262,184
2	Conservation and rational use of water resources	No expenses
3	Land conservation	137,020,691
4	Subsoil conservation and rational use	2,557,021,670
5	Flora and fauna conservation	54,313,846
6	Production and consumption waste management	335,350,686
7	Introduction of management systems and best available technologies	2,455,650
8	Scientific research and FEED and design projects aimed at the environmental protection	278,548,579
9	Radiation, biological and chemical safety	2,689,537
10	Environmental awareness and environmental promotion	35,129,150
	Total:	**3,962,791,993**

Implementation of KPO environmental protection measures in the Western Kazakhstan Oblast in 2014 allowed achieving the following results:

- Air emissions reduced by 58% in comparison with 2013 as a result of implementation of the measure "Partial oil recovery during well clean-up". In 2014 air emission saving totalled 3,481 tonnes, whereas in 2013 the saving was 2,210 tonnes;
- In 2014 the quantity of re-used treated water increased by 92 % in comparison with 2013. In 2014, 123,419 thousand m^3 of water was reused; whereas in 2013 the volume of reused water totalled 64,343 thousand m^3;
- In 2014 the area of reinstated lands increased by 20% in comparison with 2013, 59 hectares of the soil disturbed as a result of well operations and construction activities had been remediated. In 2013, 49.1 hectares of soil was restores;
- Approximately 6,823.3 tonnes of wastes accumulated at the solid waste and spent drilling mud disposal site were treated by Eco Centre units. 146.46 tonnes of solid waste from the sock filter were caught and transported to the Solid Industrial Waste Burial Landfill.

AIR EMISSIONS

In 2014 as a result of KPO production activities 14 thousand tonnes of pollutants were emitted to the air; amongst all the primary pollutant was sulphur dioxide SO_2 (52%). The other significant pollutants were nitrogen oxides NO_X (16%), carbon monoxide CO (16%) and saturated hydrocarbons C_nH_n (13%).

SO_2 is produced mainly because of the flaring of the associated gas and incinerator return air; NO_x and CO occur as a result of fuel combustion allowing operating the gas-turbine power plants, boilers, process heaters and compressors.

Conducting activities to manage the air emissions based on the limits established according to the Environmental Emissions Permit, over the last three years KPO has performed its activities without exceeding the permissible limits. The table 16 provides the information about permissible and actual emissions by KPO over the period of 2012-2014. The total volume of environmental emissions was increased by 24% in comparison with 2013. Emission increase is caused by the increased scope of well operations which envisage well completion activities with flaring following multistage hydraulic fracturing.

Table 16. Permitted and actual volumes of pollutant's emissions

Annual volume of emissions broken down by the pollutants, in tonnes:	2012	2013	2014
Permitted:	**15,290**	**15,321**	**16,168**
Actual, incl.:	**10,215**	**11,320**	**14,005**
Nitrogen oxides	1,956	2,068	2,240
Sulphur dioxides	4,957	5,703	7,346
Carbon monoxide	1,464	1,637	2,229
VOCs	1,645	1,700	1,718
Hydrogen sulphide	29	29	31
Solid particles	88	110	325
Others	77	73	116

Notes:

1. *Emission volumes are provided in accordance with records of statistics reports 2-TP Air.*

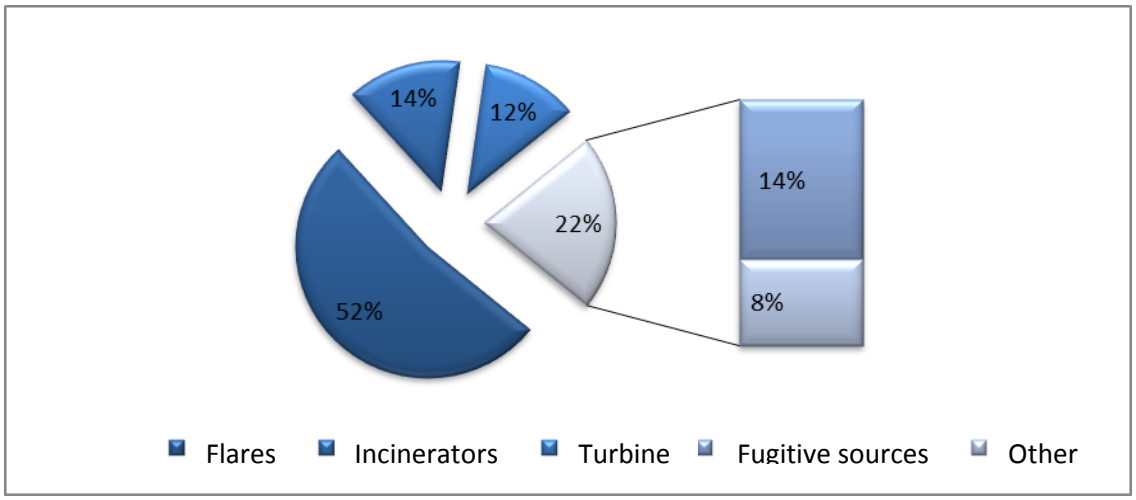
2. *In 2014, KPO operated under three EEPs. From 01.01.14 - 31.07.14 Permit No. 0000278; from 01.08.2014 - 27.11.2014 Permit No. KZ21VCZ00022905; from 28.11.2014 - 31.12.2014 Permit No. KZ46VCZ00024104. The total permissible volume was calculated as a sum of actual emissions for first two periods and permissible emissions for the third period.*

Environmental emissions in KPO are estimated using the calculation method based on the initial data on consumption and composition of the fuel and equipment operation time. KPO applied the calculation method due to the lack of the certified devices in the RoK to ensure continuous monitoring at the emission sources.

Rate of oil, sour and fuel gas consumption for flaring is calculated applying the method of continuous measurements and fuel balance; diesel fuel consumption is calculated based on the data of statutory accounting; equipment operation time is calculated based on the daily operator reports. The oil and gas composition is determined by internal certified laboratory.

Componential calculations of emissions are carried out on the basis of the data on every substance and type of emission sources applying the methods recommended for application in the Republic of Kazakhstan.

Graph 8. Distribution of pollutant emissions at KPO for 2014 by main air pollution sources

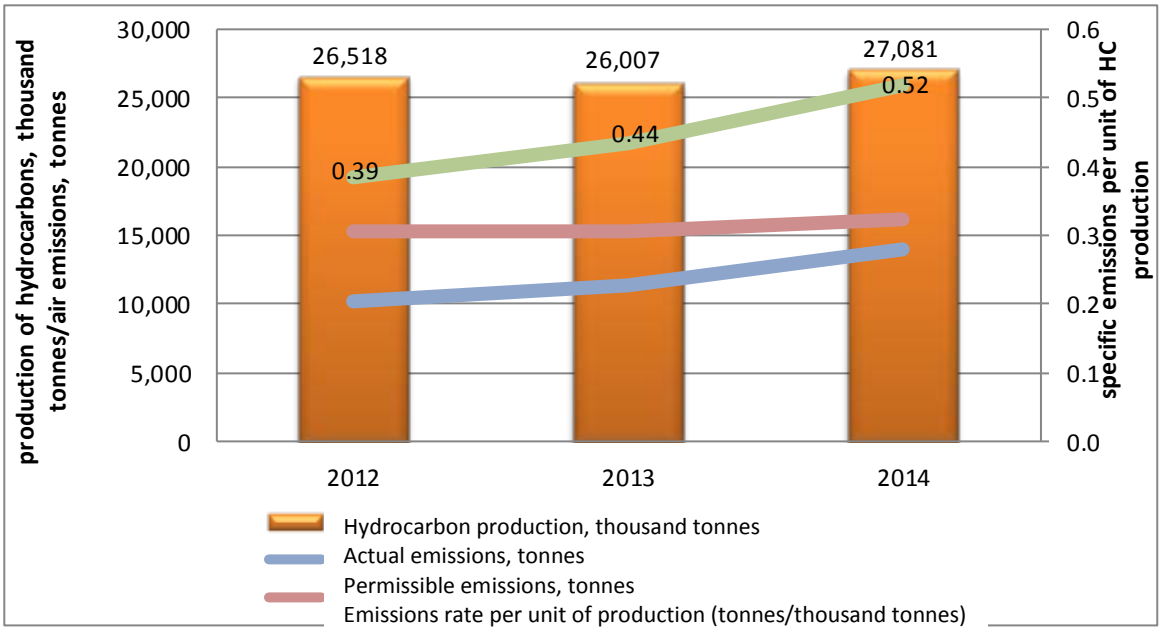


In 2014 specific emissions per unit of production amounted to 0.52 tonnes per thousand tonnes of hydrocarbons (HC) production.

Increase in specific emissions in 2014 in comparison with 2013 was caused by the planned preventive maintenance conducted in 2013 (as a result of the equipment shutdown for the planned preventive maintenance, the equipment, which made a considerable contribution to gross emissions (turbines, incinerators, high-pressure boilers), didn't operate for some time, thus annual emissions were lower in 2013), as well as by significant growth (29%) in scope of flaring of associated gas which was caused mainly by increase in volume of well operations including persistent efforts to perform multi-stage fracturing. Due to the use of

the oil recovery equipment 36% of liquid hydrocarbons of the base volume[1] were flared; the base volume was lower in comparison with 2013 (66%).

Graph 9. Volume of hydrocarbon production and environmental emissions in 2012-2014



Gas flaring

Main contributors to the KPO total volume of emissions were emissions resulted from flaring of crude hydrocarbons at flare stacks of the process facilities and wells (52%). In 2014, the gas flaring volume was 0.19% of the total volume of gas produced by KPO or 1.16 tonnes per thousand tonnes of produced crude oil (according to OGP report data for 2013, the similar worldwide average volume totalled 15.1 tonnes per thousand tonnes, and European average - 3.83 tonnes per thousand tonnes)[2]. This confirms that KPO had achieved very good emissions saving performance indicators amongst International and European oil and gas production enterprises.

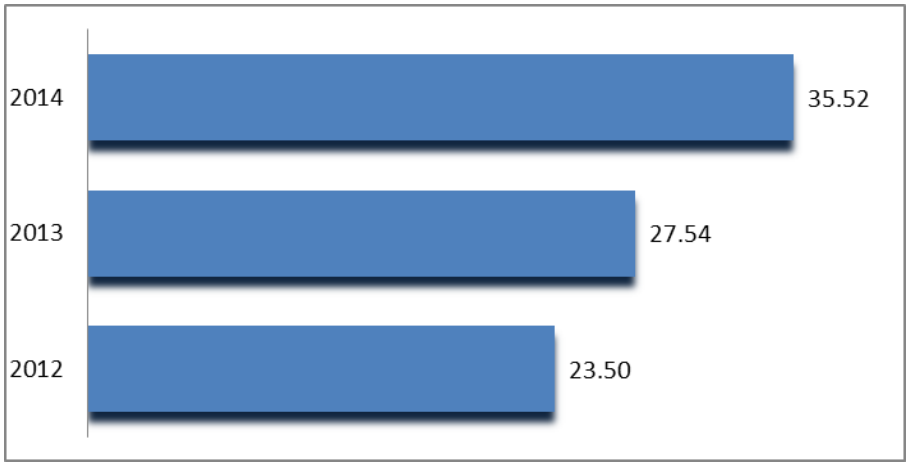
Nevertheless, KPO continues to look for and introduce further emission reduction technologies, especially in the areas of well testing and well clean-up.

An increase in actual and specific gas flaring volumes by 29% and 23%, respectively, compared to 2013, was due to the increased scope of the well operations. In 2014, 19 wells were completed against 14 wells completed in 2013.

[1] *i.e. of the volume flared without this equipment.*

[2] *The data was sourced by the Annual reports of International Associations of Oil & Gas Producers, (IOGP) «Environmental performance indicators-2012 data» and «Environmental performance indicators-2013 data». Since the report for 2014 has not been issued yet, the 2013 data is used for comparison purpose.*

Graph 10. Volume of associated flared gas, mln m^3

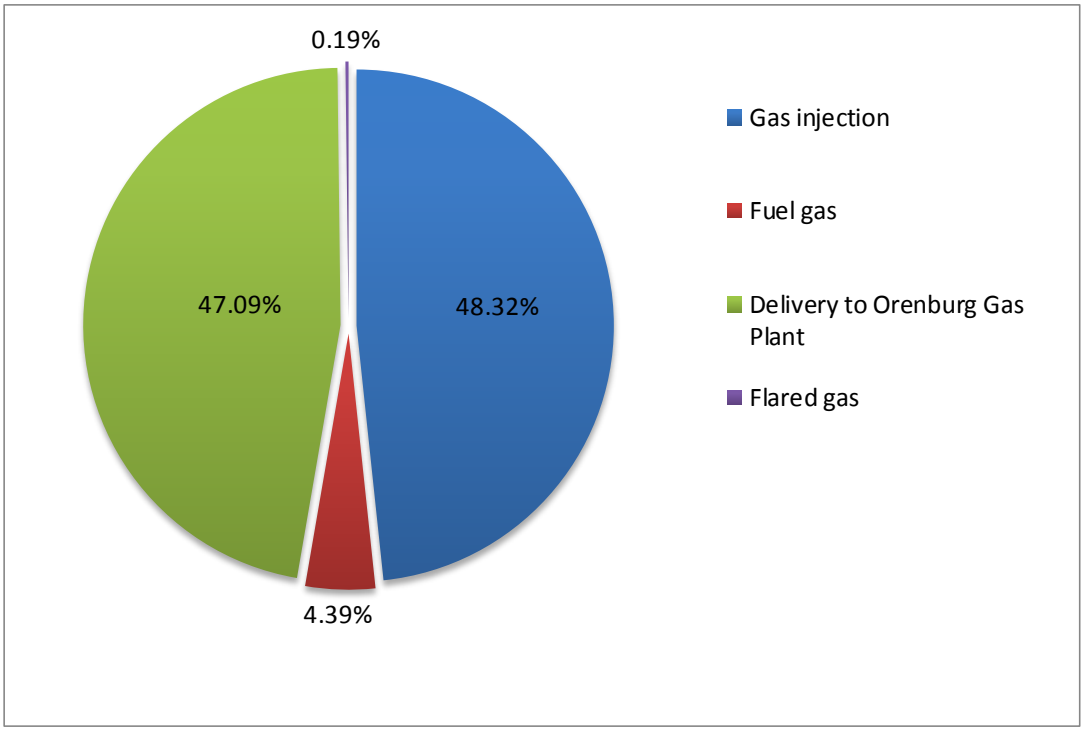


In 2014, apart from the use of new equipment for partial oil recovery during well clean-up, KPO also used the "Megaflow" equipment. As a result of adopting these initiatives, the volume of liquid hydrocarbons flaring decreased by almost 50,000 tonnes of oil, which totalled to 63% of the oil volume produced during well completion. In 2014, 10,000 tonnes more were saved if compared to 2013. Due to the "Megaflow" system the gas flaring volume during well clean-up totalled to 29 mln m^3 with approved volume of 48.8 mln m^3.

Gas utilization in 2014

In 2014, KPO achieved the gas utilization rate of 99.81% (against 99.84% in 2013) that was the indicator of world-class level, taking into account the fact that the performance target approved by Regulatory Authorities within the Associated Gas Utilization Program was 99.61%.

Graph 11. Gas utilization and flaring in 2014



ENVIRONMENTAL MONITORING

KPO conducts large-scale monitoring in accordance with the Production Environmental Control Program (PEC). Within the scope of PEC, monitoring of both environmental emission (industrial emissions, wastewater, and production waste) and the quality of environmental components (air, surface and underground water, soil) is conducted to assess the impact of production activities on the environment. The Production Environmental Control Program determines sampling/measuring locations, the list of components to be identified and monitoring frequency.

The PEC is conducted in the territory of Karachaganak field and at the sanitary protection zone boundary, in nearby villages, along the motor road and at the facilities of condensate export pipeline within KPC –Bolshoi Chagan –Atyrau.

Implementation of required operations during the production process has some unavoidable impacts on the environment, including the air. Process continuity cannot be ensured without concurrent generation of power, heat, steam and hot water by combustion of liquid and gas fossil fuel. Main pollutants are generated as a result of natural gas burning. Environmental emissions are generated due to the fuel gas combustion by gas drives of turbines of power plants and compressor stations, combustion chambers of boiler units and process furnaces, and incinerators. In the process of fuel gas combustion such pollutants

as carbon monoxides, nitrogen and sulphur oxides are mainly produced. Furthermore, emission from the oil fields may contain hydrogen disulphide, as it is contained in the crude product.

Air quality monitoring at the boundary of the sanitary protection zone of Karachaganak field and adjacent villages is arranged and carried out in accordance with the requirements of the State standard GOST 17.2.3.01-86 «Nature protection. Atmosphere. Air quality control regulations for populated areas» and the RD 52.04.186-89 « Guidelines for the control of air pollution».

In accordance with the Article 124 Item 9 of the Environmental Code of the Republic of Kazakhstan, PEC shall be carried out by the production or independent laboratories, certified according to the procedure established by Law "on Technical Regulation" of the Republic of Kazakhstan. KPO conducts air monitoring by means of a contracting certified laboratory, which performs sampling, sample analysis and makes instrumental measurement in accordance with the PEC Programme. Moreover, continuous air monitoring is conducted by means of 18 stationary automatic environmental monitoring stations (EMS), 16 of which are located at the boundary of the sanitary protection zone and within the territory of the field, and 2 -in the village of Berezovka. If required, for purpose of air monitoring 2 mobile environmental monitoring stations are also mobilised.

Automatic monitoring station serves a double function operating as a notification system and a system of collecting data on air quality within KOGCF. The notification system activates an alarm in case of high concentration of the controlled pollutants in the air. Each automatic monitoring station has 4 analysers designed for continuous control of hydrogen sulphide, sulphur dioxide, nitrogen dioxide and carbon monoxide content in the air.

To evaluate the air quality, health-based exposure limits same as maximum permissible concentrations are applied. Recorded concentrations of controlled components are compared with health-based exposure limits, indicating the level of pollution in % of maximum permissible concentrations.

Maximum permissible concentration (MPC) of an air pollutant is concentration which does not cause a direct or indirect lifelong negative impact on the present or the future generations and does not reduce the working capacity of a person and his/her health and does not deteriorate the sanitary and living conditions of human beings.

In 2014 there no cases of exceedance of daily average maximum permissible concentration of air pollutants was detected at the boundary of the SPZ and villages adjacent to the Karachaganak field.

Air monitoring at the boundary of the sanitary protection zone of the Karachaganak field

Once a day the certified Contractor laboratory conducts air sampling at the boundary of the SPZ. The samples are analysed for the content of hydrogen sulphide (H_2S), sulphur dioxide (SO_2), nitrogen dioxide (NO_2), carbon monoxide (CO), methane (CH_4) and methylmercaptan (CH_3SH). Annual average concentration of the monitored air components at the boundary of the SPZ for 2014 is given in the table 17:

Table 17. Annual average concentrations of monitored components at the boundary of SPZ in 2014

Monitored components	Actual annual average concentration, mg/m^3	MPC one-time, mg/m^3	Exceedance of MPC
H_2S	0.002	0.008	no
SO_2	0.005	0.125*	no
NO_2	0.026 - 0.028	0.2	no
CO	0.433 - 0.453	5.0	no
CH_4	0.146 -0.177	50**	no
CH_3SH	Below limit of detection	0.001	no

** MPC one time. The value of MPC one-time for sulphur dioxide is not determined so MPC one-time is used for the comparison.*

*** determined approximate safe level of impact. MPC for methane is not determined.*

Atmospheric air monitoring in the villages adjacent to the Karachaganak field

The certified Contractor laboratory has stationary air monitoring stations in 8 villages located all around the field (Berezovka, Bestau, Zharsuat, Zhanatalap, Dimitrovo, Karachaganak, Priuralnoe, Uspenovka) and in the town of Aksai which is used for air sampling purpose 4 times a day (at 1:00 am, 7:00 am, 01:00 pm and 7:00 pm). Sampling of air is carried out by the permanent personnel of the contracting laboratory who reside in the villages where the stationary air monitoring stations are located.

Moreover, the stationary monitoring stations ensure the unscheduled air sampling if a gas odour complaint is received from the residents. Air samples are delivered to the laboratory located in the town of Aksai where the samples are analysed to identify the concentration of 4 main components (hydrogen sulphide, sulphur dioxide, nitrogen dioxide and carbon monoxide/carbon monoxide) controlled in the air in accordance with State Standard and Ruling Documents. Additionally, (once in 10 days) air is monitored for concentration of volatile organic components (benzene, xylene, and toluene). In the village of Berezovka, the air concentration of methylmercaptan is controlled in addition to above-mentioned components.

Monthly results of air monitoring are published in local printed media and sent to the villages for placement on the information boards.

Annual average concentrations of monitored components in the air of village in 2014 are given in the table 18:

Table 18. Annual average concentrations of monitored components in the air of the villages adjacent to KOGCF in 2014

Monitored components	Actual annual average concentration, mg/m^3	MPC daily average, mg/m^3	Exceedance of MPC
H_2S	0.001 -0.002	0.008*	no
SO_2	0.005	0.125	no
NO_2	0.027	0.04	no
CO	0.431 - 0.453	3.0	no
Benzene	0.084 - 0.107	0.3*	no
Toluene	0.013 - 0.015	0.6*	no
xylene	0,013 - 0,014	0.2*	no

** MPC one-time. MPC daily average for hydrogen sulphide is not established, therefore, MPC one-time is referred to for comparison purpose; MPC one-time is also applied in order to evaluate the concentration of benzene, toluene and xylene in the air given the frequency of components analysis of the samples, which is once every 10 days.*

Air monitoring by Automatic Environmental Monitoring Stations

KPO Automatic Environmental Monitoring Station performing a continuous air monitoring is an additional source of information on the air condition at the boundary of the sanitary protection zone and in the village of Berezovka.

Annual average concentrations of monitored components in 2014 recorded by Automatic EMSs are given in the tables 19 and 20:

Table 19. Annual average concentrations of monitored components in 2014 recorded by EMS

Monitored components	Actual annual average concentration, mg/m^3	MPC daily average, mg/m^3	Exceedance of MPC
H_2S	0.001	0.008*	no
SO_2	0.002-0.006	0.125	no
NO_2	0.003-0.019	0.04	no
CO	0.1-0.4	3.0	no

**MPC one-time. The MPC daily average for hydrogen sulphide is not established, therefore, MPC one-time is applied for comparison purpose.*

Table 20. Annual average concentration of monitored components in 2014 recorded by EMSs # 013, 014 in the Berezovka village

Monitored components	Actual annual average concentration, mg/m^3	MPC daily average, mg/m^3	Exceedance of MPC
H_2S	0.001	0.008*	no
SO_2	0.002 - 0.005	0.125	no
NO_2	0.004- 0.019	0.04	no
CO	0.1 -0.2	3.0	no

**MPC one-time. The MPC daily average for hydrogen sulphide is not established, therefore, MPC one-time is applied for comparison purpose.*

Direct greenhouse gas emissions

Across the Company direct greenhouse gas (GHG) emissions are regulated under the national system of limitation of the greenhouse gas emission effective from 2013 and quotas trading. Since 2013 KPO has been obtaining the quotas for greenhouse gas emissions.

In 2013 KPO developed an internal procedure regulating GHG emission management activities of the company taking into account legislative requirements on regulating greenhouse emission in the Republic of Kazakhstan and the requirements of parent companies.

The KPO's GHG emissions quota for 2014-2015 totals **3,267,075** tonnes of carbon dioxide (CO_2) in accordance with the second approved national plan for distribution of GHG quotas.

To ensure that the GHG emissions are within the issued quota limits, on a quarterly basis and at the end of the year the GHG emissions assessment for carbon dioxide (CO_2) and methane (CH_4) was conducted in full concordance with the approved monitoring plan for 2014-2015. Emission assessment was performed by calculations on the basis of the Company's production data applying the effective Methodology No. 280 dated 05.11.2010 approved by the Authority.

To calculate greenhouse gas emission resulted from the fuel (fuel gas, crude gas, liquid hydrocarbons) combustion, the Company's fuel consumption data, which was prepared applying the calculation and balance method on the basis of readings of fuel flow accounting system metering devices, was used.

For calculation of CO_2 emissions rates as a result of fuel (fuel gas, crude gas, liquid hydrocarbons) combustion the averaged values of quarterly average/annual average fuel compositions were used; these compositions were typical for each facility and fuel type and calculated on the basis of weekly sampling by the KPO certified chemical laboratory.

Based on the results of conducted GHG emission monitoring and inventory taking for 2014 the total volume of greenhouse gas emission amounted to 2,027,367 tonnes of CO_2-equivalent, of which CO_2 share equalled to 1,878,229 tonnes of CO_2-equivalent (93%), and CH_4 – 149,138 tonnes of CO_2-equivalent (7%).

For conversion GHG emission into carbon dioxide equivalent (CO_2) global warming potentials (GWP)of IPCC of 1995 were used based on the climate impact of greenhouse gas for 100 years period. GWP of methane amounts to 21; GWP of carbon dioxide amounts to 1.

Thus, for 93% greenhouse gas emissions, the selected monitoring method allows making the Methodology level III emission calculations using rates produced on the basis of the continuous measurements results.

At the end of the year, the monitoring results (inventory report) for the reporting year are validated by an independent accredited organization involved to verify the reliability of produced data on Company's production activity as well as to ensure that the GHG Emissions calculation methodology was applied correctly. The fixed date of submission of the approved inventory report for the reporting year to the Authority is April 01, 2015.

On the basis of the data for the reporting year as on January 01, 2015, quota balance for 2015 for KPO was 1,388,846 tonnes of CO^2.

In accordance with produced calculations the main contributors (up to 80%) to general greenhouse gas emission in KPO are emissions resulted from combustion of the fuel gas at the gas turbines of the gas re-injection system, gas turbine power plants and high-pressure steam generation plant.

The information on the dynamics of greenhouse gas emissions generation is provided in the table 21. According to this dynamics, the GHG emissions have increased compared to the previous years. Higher emissions are caused by the increase of production capacity to maintain the level of liquid hydrocarbon production due to increase of the gas factor while the KOGCF development.

Table 21. Dynamics of GHG emissions generated in the course of KPO production activities

General volume of greenhouse gas emission (in tonnes CO_2 equivalent)					
From fuel combustion at flares and incinerators	From fuel combustion at stationary sources	Fugitive emissions	Total GHG emission 2014	Total GHG emission 2013	Total GHG emission 2012
248,742	1,632,520	146,105	2,027,367	1,730,694	1,769,768

Notes:

1. *The data for 2012, 2013, 2014 validated by the independent accredited organization.*
2. *The values for 2013 were revised following validation of the inventory report by the independent accredited organization.*

Indirect greenhouse gas emissions

KPO has a gas turbine power plant designed to ensure power supply for the whole production facility of the field and adjacent villages. Indirect greenhouse gas emissions at KOGCF generated as a result of electric power consumption from the regional power systems of the WKO constitute an insignificant part (of the total KPO GHG emissions - 0.004%).

The volume of indirect GHG emissions in KPO over 2014 totalled 87 tonnes of CO_2- equivalent. These emissions are not subject to accounting and are not included into the reporting data provided under the internal GHG emission quota system of the Republic of Kazakhstan. The information on the indirect emissions is provided in the reports for the KPO's parent companies. Calculation of the indirect GHG emission is carried out by multiplying the actual volume of purchased electric power (MW - hour) by the international Emissions rate (0,684 tonnes/MW-hour) for Kazakhstan.

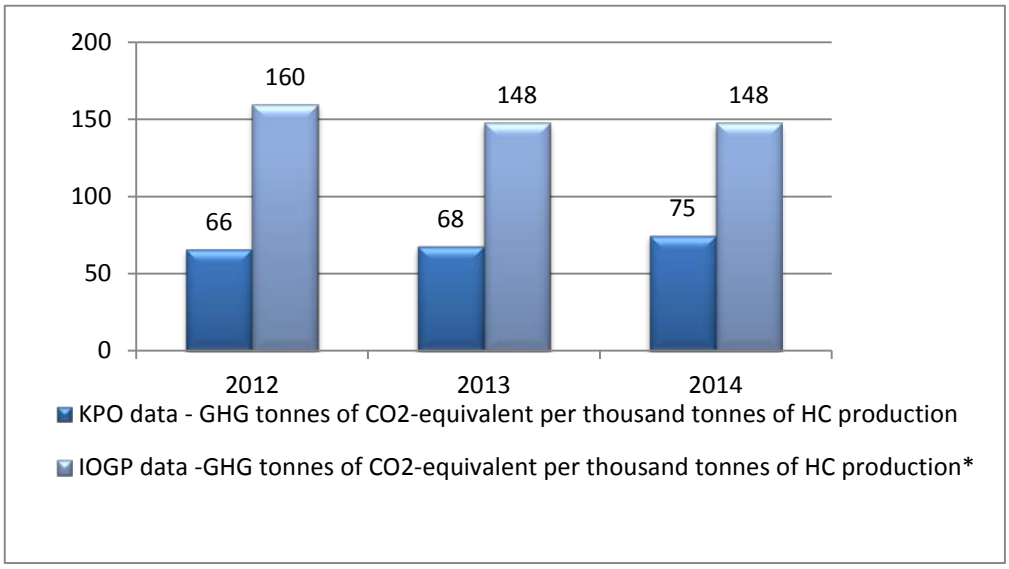
Specific greenhouse gas emissions

In 2014 specific greenhouse gas emissions per the unit of production totalled to 75 tonnes per thousand tonnes of crude hydrocarbon production**.** Increase in these emissions in comparison with the previous period was caused by the following main reasons:

- Increased volume of crude hydrocarbons flaring (by 41% for gas, by 36% for liquid hydrocarbons) during well operations due to using the technology of multistage hydraulic fracturing of formation to intensify the well flow and stimulate the maximum production;
- Increased capacity due to fuel combustion by the power plant gas turbines resulting in increase of the volume of electric power supply to an external WKO consumer network by 6% upon the request of LLP «Batysenergoresursy» and LLP «Aksaienergo»;
- Increased capacity due to the fuel combustion by the gas turbines of the gas reinjection system to 3%, and by the HP steam generators to 7% as a result of partial shutdown of production facilities for the planned preventive maintenance in 2014.

Dynamics of specific greenhouse gas emission is shown in the graph 12.

Graph 12. Dynamics of specific GHG emission per unit of HC production



**The data source is annual reports of the International Associations of Oil & Gas Producers (IOGP) «Environmental performance indicators-2012 data» and «Environmental performance indicators-2013 data». Due to the fact that the 2014 report has not been released yet, the 2013 data is used for comparison purpose.*

Despite the justified increase, as it can be seen from the table 22, the specific emissions per the unit of hydrocarbon produced are lower than the European values by 27%-29% and the average international oil and gas producers' (IOGP) values by 49–51%.

Table 22. Comparative analysis based on the specific greenhouse gas emissions per the unit of hydrocarbons produced

Categories of environmental indicators	KPO data			IOGP data (Europe)*	IOGP data (in total)*
	2012	2013	2014	2013	2013
CO_2+CH_4 (CO_2e)					
Tonnes per thousand tonnes of hydrocarbons produced	66	68	75	106	148
CO_2					
Tonnes per thousand tonnes of hydrocarbons produced	59	62	69	94	128

** The data source is annual reports of the International Associations of Oil & Gas Producers (IOGP) «Environmental performance indicators-2012 data» and «Environmental performance indicators-2013 data». Due to the fact that the 2014 report has not been released yet, the 2013 data is used for comparison purpose.*

Reduction of GHG emission

For the purpose of systematic GHG emission reduction and to comply with the legislative requirements of the Republic of Kazakhstan, KPO has developed the "Greenhouse gas emissions reduction program for 2014-2015". The program for 2014 set the following objectives:

- To reduce greenhouse gas emission (CO_2) by 200,970 tonnes through implementation of a number of projects,
- Not to exceed specific emissions volumes of 70 tonnes of CO_2 per thousand tonnes of HC produced.

In 2014 the company had made all efforts to accomplish the set GHG emissions reduction indicators. Specific indicator of CO_2 emissions totalled 69 tonnes of CO_2/thousand tonnes of crude hydrocarbons production (table 22). Actual reduction of greenhouse gas emission totalled 96% of the target indicator as a result of implementation of 4 projects (table 23).

Table 23. GHG emissions reduction measures

№	Measures	Emissions reduction, tonnes/year		% of execution
		Target	Actual	
1	Partial oil recovery while well clean-up	173,400	147,149	85%
2	Repairing of valves of KPC flare headers	11,133	24,401	219%
3	Adjustment of the steam flowmeter at processing train No. 4	7,197	9,529	132%
4	Monthly washing of operating axial-flow compressors of gas turbines by water during spring and summer period	9,240	12,209	132%
	Total:	**200,970**	**193,288**	**96%**

POWER CONSUMPTION

Table 24. Our energy management targets

Our 2014 targets	Target achievement	Actions taken in 2014	Targets for 2015
Implement the Energy management system by the end of 2014 in accordance with ISO 50001 standard	In progress	• The boundaries and scope of energy management system have been defined; • The Policy for energy management has been developed and approved; • Draft procedure for energy planning was developed; applicable legislative requirements were identified; • Approximately 70 employees have undergone the introductory course on implementation of energy management system.	• To conduct energy audit in accordance with the law of the RoK, to obtain Conclusion for energy saving and efficiency and to develop an action plan for energy saving and energy efficiency increase; • To develop and implement the elements of the energy management system for energy planning, implementation and maintaining; • To continue personnel training on Implementation of the Energy Management System.

Implementation of energy management system

Early 2014 the report on the results of the research carried out to identify the constraints of the energy management system was issued; the research was conducted by the specialists of the West Kazakhstan branch of the JSC "The National inspection and certification centre". In 2014 the activities on the system implementation were performed, i.e. scope and constraints of the system were identified, the energy policy developed and approved, the draft energy planning procedure developed, applicable legislative requirements identified, training of the company personnel involved in implementation and maintenance of the system arranged.

Energy audit

In accordance with the requirements of the RoK Law "On energy saving and energy efficiency" the entities included into the State Energy Register are subject to the mandatory energy audit no less than once in five years.

In 2014, KPO held the tender for conducting the energy audit planned for 2015. Following the energy audit a Conclusion for energy saving and energy efficiency improvement will be issued. On the basis of the Conclusion the company will set energy objectives and targets and develop the energy management action plans.

Electric power consumption

In 2014, the fuel consumption by non-renewable sources totalled 32.95 * 10^{15} J. As it can be seen from the below table 25 the fuel was mainly consumed by the gas re-injection compressors gas turbines, gas turbine power plant units and boilers and heaters.

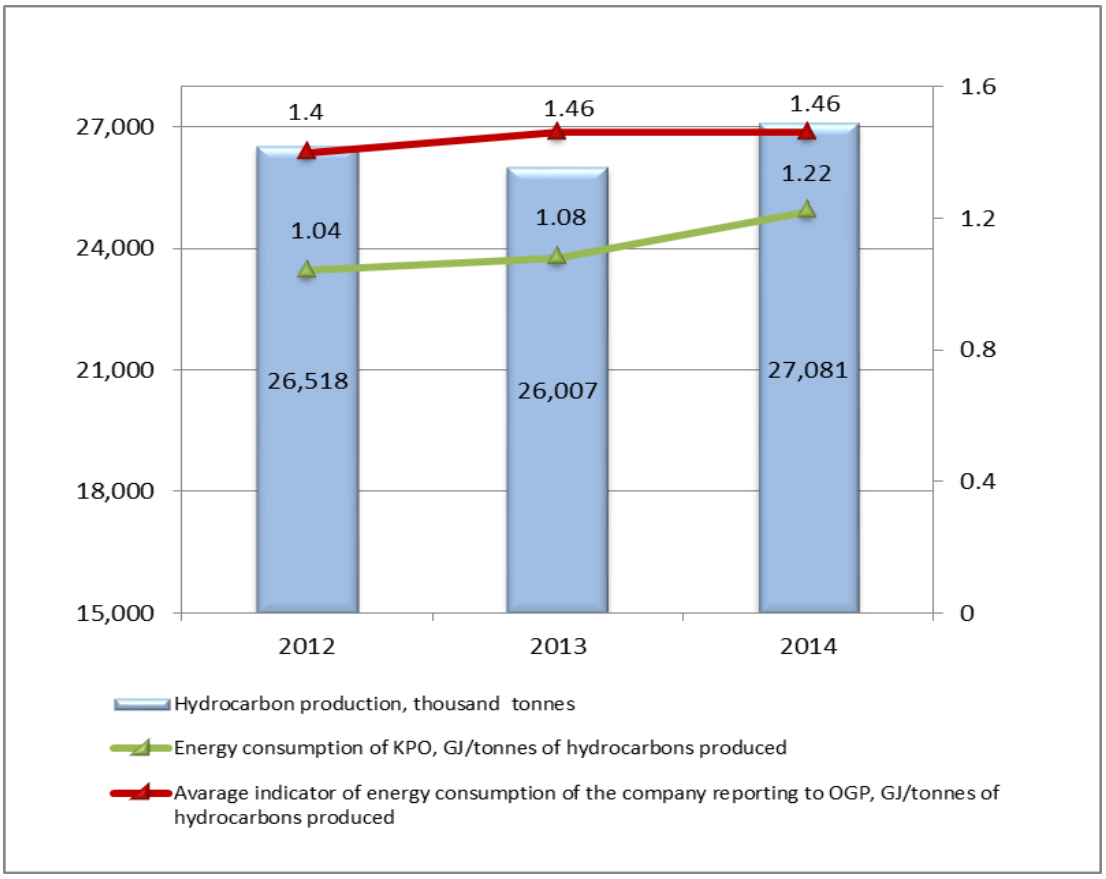
Table 25. Fuel consumption by non-renewable sources, 10^{15} J

Fuel consumption		**2012**	**2013**	**2014**
Fuel consumption by the gas re-injection compressors gas turbines, processed gas		9.08	8.84	9.76
Fuel consumption by the gas turbine power plant units to generate the electric power by generators using mainly processed gas	Production needs of KPO	6.10	6.22	7.55
	Electric power supply to West Kazakhstan oblast consumers	3.74	3.53	4.15
	Total consumption	9.84	9.75	11.7
Fuel consumption to generate electric power by the internal combustion engines using the processed gas and diesel		0.08	0.05	0.05
Fuel consumption by the boilers and heaters to generate heat and steam, using mainly processed gas		5.70	5.38	6.40
Fuel consumptions by incinerators and flares, processed gas		1.30	1.18	1.36

Fuel consumption by motor transport, diesel, gasoline	0.05	0.04	0.04
Flaring of hydrocarbons mixture at the flare stacks of process facilities and wells	1.39	2.66	3.63
TOTAL	**27.44**	**27.89**	**32.95**

Increase in fuel consumption in 2014 is caused by the increased production capacities to maintain the liquid hydrocarbons production level. However, as it can be seen from the below graph 13, the energy intensity indicator (ratio of the quantity of consumed energy, GJ and the quantity of output production, tonne of crude hydrocarbons) changed insignificantly in comparison with 2013. In spite of little increase of the energy intensity in 2014, the indicator remain lower than the average value of the energy intensity of oil and gas producers reporting to the international association of oil and gas producers (IOGP).

Graph 13. Dynamics of change of the energy intensity (ratio of the quantity of consumed energy, GJ and the quantity of output production, tonne of hydrocarbons)



The below table 26 shows the dynamics of the energy resources volumes purchased by the field facilities over the last three years.

Table 26. Energy power, in MW-hour (10^{15} J)

	2012	2013	2014
Electric power, total	923,082 (3.32)	907,909 (3.27)	975,588 (3.51)
Electric power generated by the Gas Turbine Power Plant incl.:	920,944 (3.32)	903,792 (3.25)	973,549 (3.50)
Electric power generated for needs of KPO	570,582 (2.05)	574,243 (2.07)	628,020 (2.26)
Electric power generated for needs of the West Kazakhstan Oblast	350,362 (1.26)	329,549 (1.19)	345,529 (1.24)
Electric power purchased for needs of KPO	2,138 (0.008)	4,117 (0.015)	2,039 (0.007)

Fuel consumption is defined by calculations based on the initial data on fuel consumption and composition. Fuel consumption is defined by continuous measurements and balance as well as the fiscal measurement accounting data. Fuel composition is identified by the KPO certified laboratory.

While calculating the indicator of the energy intensity, all types of the fuel given in the table 25 consumed internally by the company were taken into account.

WATER RESOURCES

Water is not just industrial feedstock but, it is a primary source of life. Conservation and rational use of water resources is an important and prioritised task for KPO.

The total volume of water consumption at KPO in 2014 is 490,721 m^3, including 391,855 m^3 of technical water and 98,866 m^3 of potable water.

Graph 14. Water consumption at KPO

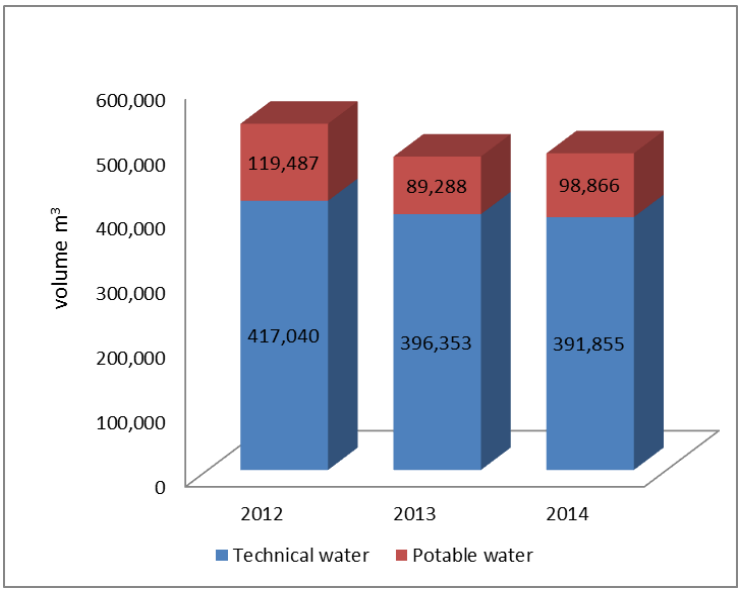


Table 27. Water consumption at KPO by sources, m^3

Water consumption	2012	Limit*, 2012	2013	Limit*, 2013	2014	Limit*, 2014
Zharsuat water intake facility	117,843	-	86,820	-	97,359	-
Serebryakovskiy water intake facility	1,644	-	2,468	-	1,507	-
Kigach water intake facility	3,032	-	4,601	-	2,829	-
Konchubai gully water pond	414,008	578,904	391,752	578,904	389,026	578,904

** As per the RoK Special Water Use Permit for industrial needs*

Table 28. Secondary use of treated wastewater, m^3

	2012	2013	2014
The total volumes of the reused treated wastewater, including:	**98,778**	**64,343**	**123,419**
For drilling and drilling mud preparation needs	*19,190*	*33,579*	*108,799*
Irrigation and hydrotests	*68,698*	*13,335*	*2,555*
Dust suppression	*10,890*	*17,429*	*12,065*

The reused water volume totalled 32% of the consumed technical water volume.

Technical water

The main source of water supply for technical needs in the Karachaganak field is the holding pond No.1 at Konchubai gully. KPO is a primary user holding the RoK Special Water Use Permit for industrial needs until 2015 with annual water intake limit of 578,904 m^3.

Konchubai gully is not included into the list of fishery water bodies of local significance according to the Resolution of the West-Kazakhstan Oblast Akimat No.269 dated December 25, 2012.

The Kigach water intake supplies Terminal Atyrau OPS with technical water through Astrakhan – Atyrau water line, where it is used for domestic and technical purposes. Over 2014 at Terminal Atyrau the volume of water intake for technical needs totalled 1,711 m^3, that was 52% lower compared to 2013 volume (3,557 m^3). This decrease was due the fact that in 2013 following the planned inspection of the fire water tanks, the damages and detaching of the bottom and wall coating were detected. Upon the repair of the damaged sections the fire water tanks were filled with water again.

In case of low amount of precipitations in winter, there is a risk of lowering of a water level required for water intake for KOGCF needs. The Company has two backup wells No.9 and 4 supplying the water of the technical quality.

In order to reduce fresh water intake for drilling mud preparation, watering of greenery, dust suppression on roads and construction sites, whilst drilling operations, and to avoid interstratal break-ups, the Company used treated domestic, industrial wastewater and storm runoffs. In 2014, KPO re-used 123,419 m3 of treated wastewater for technical needs. The water was mainly used for the drilling needs, the volume of water consumed was twice the volume of 2013 (64,343 m^3).

Detailed description of the water use is shown in Table 28.

Domestic water

KPO is the secondary user of water for domestic needs. The sources of domestic water supply for KPO are Zharsuatskiy water intake - the Karachaganak field, Serebriakovskiy intake - Bolshoi Chagan OPS and Kigach intake - Terminal Atyrau OPS.

The potable water is used exclusively for domestic needs of the facilities, except for Bolshoi Chagan OPS, where water is used to replenish fire tanks because of the absence of another source.

In 2014 the volume of water consumption for KPO domestic needs totalled 99,621 m^3, that was 11% higher compared to 2013 (89,412 m^3).

Potable water accounting at the facilities is conducted using water metering devices and is recorded in the log book according to the primary accounting rules of the RoK.

Discharge of treated wastewater

KPO strives to optimize the use of clean water at the enterprise through implementation of a set of measures for water resources conservation, and re-use of treated water, wherever possible.

The Company uses specially built facilities (holding ponds) for treated domestic and industrial wastewater and storm runoffs. These facilities do not only eliminate the penetration of contaminants into soil and groundwater, but also allow treated wastewater to be collected for re-use for technical needs, thereby reducing fresh water intake.

The treated associated produced water is injected into the subsurface formations of Polygons 1 & 2.

The 2014 Environmental Emissions Permit did not set the limits for the discharge volumes. The limits, in tonnes, were established for the concentration of contaminants. In 2014 the actual volume of treated wastewater totalled 408,439 m^3 that was 4% lower than in 2013 (426,470 m^3).

Discharge of treated wastewater is conducted according to MPD (Maximum Permissible Discharges) Limits Project for contaminants discharged with wastewater into water bodies (which are the specially built artificial constructions: holding ponds, installed near the KCC , the Unit-3 seasonal tank and the ponds on the Atyrau – Bolshoi Chagan Terminal) and subsurface formations. The treated wastewater is not discharged into the natural water bodies, like rivers and lakes. Up to date, the MPD limits project for 2014 – 2015 and wastewater quality monitoring schedules have been developed and approved by the regulatory authorities.

Table 29. Total discharge volume, specifying wastewater categories and receiving facility, m^3

Receiving facility	Type of wastewater	2012	2013	2014
Holding ponds	Domestic wastewater	93,772	78,383	75,858
Wastewater subsurface disposal polygons	Process and associated produced water	265,118	342,458	330,636
KOGCF terrain	Industrial and storm wastewater, melt and rain water	9,178	5,090	-
Terrain of OPS Bolshoi Chagan and Terminal Atyrau	Industrial and storm wastewater, melt and rain water	224	539	1,945
Total discharge volume		**368,292**	**426,470**	**408,439**

Since 2014 the discharge of wastewater onto the KOGCF terrain has been excluded from the MPD project.

At the KPO facilities the following types of wastewater are produced: domestic wastewater, industrial and storm wastewater, rain water, melt water, process water and associated produced water. KPO monitors the following components:

Domestic wastewater	Industrial and storm wastewater, melt and rain water	Process and associated produced water
pH, suspended solids, oil products, ammonia nitrogen, nitrates, nitrites, BOD20 and BOD5, total ferrum, synthetic surfactants, sulphates, chlorides, phosphates, dry residue, dissolved oxygen	pH, suspended solids, oil products, dry residue	suspended solids, oil products, sulphides, sulphates, chlorides, hydrogen sulphide, methanol, ferrum, cooper, zinc, aluminium

In 2014 the discharge limit for wastewater contaminants (for WKO and Atyrau Oblast) was 16,626.7 tonnes. In total, 11,544.4 tonnes of contaminants were discharged in 2014, which was 10% higher compared to 2013. Out of this volume, 10,258.5 tonnes was standard discharges, and 1,285.9 tonnes – excessive ones.
Excessive concentrations were recorded mainly for chlorides, oil products and nitrogen-ammonium components. As a result of this, tonnes of contaminants were formed exceeding the limits, for which a voluntary ten-fold payment was made by the company.

Increase of contaminants discharges in 2014 was mainly associated with the injection of the associated produced and process wastewater.

Associated formation water being produced together with crude hydrocarbons and process water is treated and injected into the formations. The volume of injected wastewater decreased by 3.5% in 2014 compared to 2013, however the quantity of contaminants increased by 13%. The increase was caused by high concentration of soluble salts in the wastewater reinjected into the formation containing high-mineralized groundwater which is not used and cannot be used for domestic and drinking, balneological, process needs, irrigation or animal breeding. Consequently, injection has no effect on components of the environment such as soil, flora and fauna.

Wastewater injection is an international practice aimed at solving the problem of disposal of high-mineralized wastewater without formation of salt-containing waste on the surface during the treatment. Due to reliable water shutoff and soil properties which are ideal for preparation and injection of wastewater, migration of water into upper aquifers is eliminated.

Exceedance of nitrogen content limits (in the form of ammonia nitrogen, nitrite or nitrate ions) occurred in domestic wastewater discharged into the holding ponds. Water from holding ponds was used for irrigation purposes where the permissible content of nitrogen compounds is much higher than for water discharge. Exceedance of oil products and suspended solids limits in wastewater contained in the KPO holding ponds was not detected.

In 2014 in order to improve the wastewater treatment quality KPO continued the works on the 2nd phase of the Project «Upgrade of domestic and oily wastewater treatment plants at KPO facilities». The works to upgrade the domestic wastewater decontamination system are ongoing at the treatment facilities of Unit-3 BIO-50. This wastewater is a potential source of viruses and pathogenic bacteria; therefore, it becomes harmful from the sanitation point of view in the event of the secondary use. Once the system is put into operation, treated domestic

wastewater will be decontaminated. The risk of bacteria getting into the seasonal pond, which supply the large volume of treated domestic wastewater for KOGCF planting irrigation purposes, is eliminated.

Furthermore, in 2014 domestic wastewater discharge metering devices were installed at the KCC holding ponds. The accounting of the treated domestic wastewater discharge is maintained in line with the Primary Accounting Rules.

In order to assess the impact of production units and take timely measures to prevent, reduce and eliminate the impact on the quality of surface and subsurface water resources, these resources are continually monitored; watercourses and potential contaminants migration is traced and documented; the compliance with current health and hygiene standards is verified.

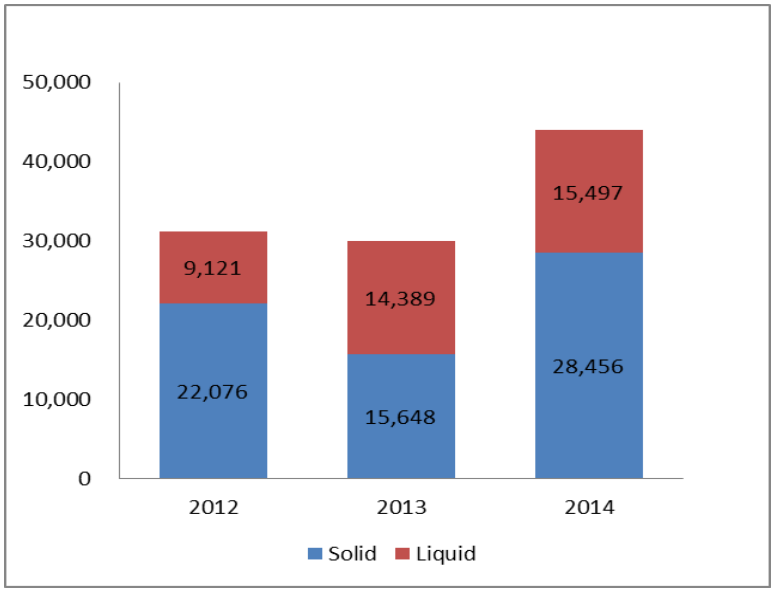
WASTE MANAGEMENT

In order to establish safe and effective system for waste management, reduction of actual and potential hazard to humans and environment posed by generated waste and based on production capacities, the Company adopted the following basic waste management methods:

- Waste disposal at the KPO waste disposal sites;
- Waste treatment at the Eco Centre facilities;
- Waste recovery to process stream; and
- Waste transfer to specialized contracting organizations, which conclude contracts for waste disposal, treatment and removal with the receiving organizations.

The below graph shows the dynamics of waste generation. In 2014 the quantity of KPO generated waste totalled 43,953 tonnes.

Graph 15. Waste generation dynamics, tonnes



Waste increase had been mainly caused by the higher solid and liquid waste volumes from the well operations. In 2014 following putting a new drilling rig into operation, the drilling scopes had increased. Moreover, some

problems occurred during the drilling operations (borehole reaming to nominal size, well wall collapse and circulation loss), which also contributed to generation of the additional drilling cuttings and wastes.

In 2014, KPO conducted the planned cleaning of the KPC oily water lagoon. As a result, 2726.6 tonnes of solid waste were removed. The previous cleaning of the lagoon took place in 2007.
In 2014 KPO continued the works on clearing the field area from the unauthorized construction waste. Subsequently, 1,590 tonnes of the construction waste were removed.

Waste placement

Waste is disposed at the waste disposal facilities owned by KPO and equipped according to the documentation developed under the construction projects for the waste disposal landfills and sites. While the cells of the waste disposal landfill are filled in, the leachate leakage resistant isolation layers are placed. Watertight screen consisting of the layer of clay and geomembrane of high density polyethylene, which minimizes the potential environmental impact, is laid at the bottom of the landfill cells.

Waste treatment

Treatment of the production waste at the KPO Eco Centre facilities is an illustrative example of how the waste is managed in the RoK oil and gas industry. Reduction of waste disposal is achieved by virtue of the available KPO Eco Centre technologies.

Prior to waste disposal at the landfill, the waste is treated at the Eco Centre facilities, thereby reducing the quantity and hazardous properties of various types of the disposed waste.

Waste recovery to the process stream is the best possible way to re-use the waste.

At thermo-mechanical cutting cleaning facility (TCCF) the base oil and water are separated from the spent oil-based drilling cuttings. In 2014, 16,380.585 tonnes of wastes were treated; 2,011.76 tonnes of base oil and water were separated; and 14,348.825 tonnes of the TCC treated wastes were disposed at the solid waste burial landfill. Separation of base oil and water allowed reducing the quantity of waste produced after the treatment of oil-based drilling cuttings to be disposed at the landfill by 12%.

In 2013 in collaboration with the Republic State Enterprise “West Kazakhstan State University named after Makhambet Utemissov” KPO initiated scientific studies to promote alternative methods of disposal of carbonate drilling cuttings of the oil-based drilling mud.

Within the scope of these studies in 2014 the university personnel conducted field and laboratory-based researches. Following the research, the pilot areas were identified to test whether the carbonate drilling cuttings can be used for roadside construction / repair and for creation of mineralized fire belts for planting protection. For creation of the pilot mineralized forest belt 32,960 tonnes of carbonate drilling cuttings were used; 317,985 tonnes of carbonate drilling cuttings were used for construction of the pilot roadside.

Following the pilot tests in 2015 the report on the studies including the recommendations for use of carbonate drilling cuttings will be developed for further agreement with all interested State Authorities.

Liquid waste treatment at the liquid treatment facility allowed re-using the by-products for the preparation of drilling mud and brines.

In 2014, 8,265.77 tonnes of liquid waste were treated. Following the treatment 7,160 tonnes of the reusable muds and brines were produced.

Based on the results of 2014, the general purpose incinerator (GPI) being in operation since 2013 allowed reducing the KPO waste disposal to the city dump by 28.3% of the total domestic waste generated in 2014.

In 2014 KPO put into operation a waste segregation unit designed to sort the industrial and domestic wastes of the company. This unit allows reducing the streams of waste to be buried and sorting by the valuable reusable components: paper, textiles, plastic bottles, glass, polyethylene, ferrous and non-ferrous metals. Moreover, the segregation unit is essential to ensure proper operation of the general purpose incinerator (GPI) as it protects the fire-proof casing of the incinerator from the elements which may damage it.

In 2014, 664.97 tonnes of solid domestic and production wastes were sent to the unit. 446.94 tonnes of the waste was sent to GPI for incineration, and 12.09 tonnes including waste paper, metal scrap, plastic, was sent to the specialized organizations for recycling and secondary use.

In 2014, segregated collection of waste paper made it possible to reduce the quantity of KPO municipal waste at the city dump by 29.14 tonnes. This quantity of waste paper collected from KPO Aksai offices within the scope of the pilot project was sent for recycling. In addition, 19.5 tonnes of the waste paper was separated as a result of sorting of the municipal waste. The collected waste paper was transferred for recycling to the WKO local toilet paper manufacturer.

Specialized Contractor Companies generally decide on the further waste management methods once the waste is accepted. On a quarterly basis the Third Party transfer reports are submitted to KPO.

Graph 16. The quantity of generated hazardous and non-hazardous waste

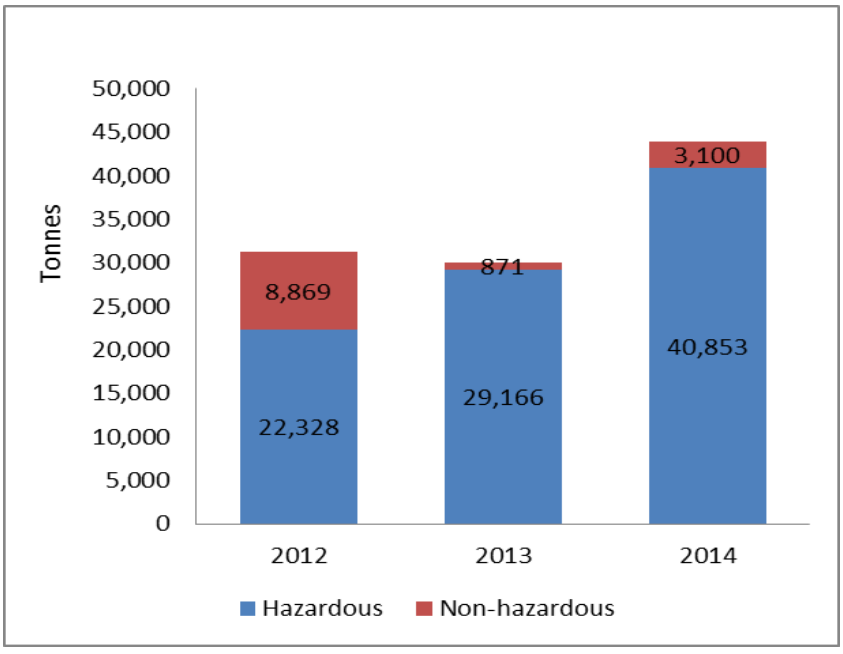


Table 30. The quantity of generated, treated, disposed and recycled waste at KPO in 2014, in tonnes

	KPO waste handling methods											
	1.Incineration				2. Recycling					3. Secondary use (spent oils, chemical discharges, etc.)	4. Burial of untreated waste at the landfill (water-based drilling cuttings)	5. Accumulated by the enterprise (waste disposed over 2014 in clit areas, cells 35 A/B, Waste Disposal Site, and remaining waste stored till the following year)	6. Waste transferred to the third party for recycling, use, incineration and burial in 2014
	Sent for incineration to the rotary kiln incinerator, general purpose incinerator	Of which			Sent for recycling to the thermo-mechanical cutting cleaning facility and liquid treatment facility	Of which							
		Losses during incineration (including emission)	Disposed at the Landfill after incineration (GPI solid waste, bag filter solid waste, GPI ash)	Temporary storage after recycling (ash from GPI)		Reused after recycling(extracted oil base, treated brines and muds)	Further recycling at the thermo-mechanical cuttings cleaning facility (oil-based drilling cuttings)	Further incineration of oil cutting by the rotating kiln incinerator	Burial of treated waste at the Landfill (TCC solid waste, water-based drilling cuttings)				
Waste generated during the reporting period	3,023.05				21,169.14					96.27	1,170.34	10,847.37	7,646.7
Waste accumulated by the enterprise in the previous years	5,995.25	1,646.93	7,677.36	2	2,871.54	9,172.05	585.68	308	14,560.63			1,505.2	457.44
2014 recycling products (oil cuttings, oil-based drilling cuttings, GPI ash)	308				585.68							2	
Recycling products accumulated by the enterprise in the previous years (TCC solid waste, GPI ash)											569.9		350.96

The KPO waste is mainly the waste produced during the well drilling and workover activities. Moreover, the water or oil base of the drilling cuttings depends on the type of the drilling mud used for the well operations. Over 2014, 31,870 tonnes of solid and liquid drilling waste were generated, that was equivalent to 72% of the total KPO waste quantity.

The below table provides details on the main wastes produced whilst well operations split by waste handling methods. As it can be seen from the table only water-based muds and cuttings are subject to disposal at the landfill. Oil-based drilling cuttings can only be buried after the treatment and extraction of the oil base.

Table 31. Waste produced from the well operations split by the waste handling methods

Waste description	Generated quantity, tonnes	Handling method
Spent water-based drilling muds	439	Treated at the Liquid Treatment Plant
	4,484	Disposal
Water-based drilling cuttings	1,170	Burial
Spent oil-based drilling muds	2,711	Treated at the Liquid Treatment Plant and Thermomechanical Cuttings Cleaning facility
Oil-based drilling cuttings	15,592	Treated at the Liquid Treatment Plant by extraction of oil base, water and followed by the burial of the solid part
Spent brines	3,887	Treated at the Liquid Treatment Plant
Spent brines	1,009	Disposal
Oily water from the drilling rig cellar	2,578	Treated at the Liquid Treatment Plant

SPILLS

In 2014 no cases of significant spills[3] were recorded in the territory of the Karachaganak field.

BIODIVERSITY

KPO is committed to conduct its operations with minimum impact on the biodiversity and ecosystem of the presence region. Many flora and fauna species inhabit the territory of the Karachaganak field including the red-listed species in Kazakhstan. Measures for preserving biodiversity of the Karachaganak Field are necessary to ensure functioning of ecosystems in its territory.

[3] The definition of a significant spill is applied to an incident, which has caused contamination of the environment through hydrocarbon/chemical spills to land or water and volume of spilled hydrocarbon/chemical exceeding 1,000 litres (as per KPO Incident classification).

The first KPO Biodiversity Conservation Action Plan was developed in 2011. The main objective of the Plan was to preserve species and their habitats in KOGCF in reconciliation with the KPO activity and land used by other interested parties within this territory.

The Plan set the measures of biodiversity monitoring and keeping records in the territory of KPO operations following which the scope of work included two phases. The first phase executed in 2012 comprised fauna researches within the KOGCF including record-keeping of rare fauna species. The second phase measures executed in 2013 are listed below:

- Vegetation monitoring in the zone of the KOGCF influence by four impact factors including environment emissions, physical impact, water intake, grazing;
- Satellite images review for three periods to identify changes in ecosystems. It is known that prior to the field development the territory of KOGCF was used for agricultural purposes. Currently, most of its territory is occupied by weed species and wormwood.
- Mapping of the riverside ecosystems of water objects of KOGCF – Berezovka river, Konchubai gully;
- Studies of expansion of Fritillaria ruthenica red-listed in the Republic of Kazakhstan. Based on the flora and fauna studies performed earlier in the field the populations Fritillaria ruthenica were recorded in 4 sites. In 2013 one more site was found. Overall increase in the number of Fritillaria ruthenica in 2013 in comparison with 2010 is likely to be connected with climatic conditions favouring for this specie. Further monitoring of Fritillaria ruthenica expansion is planned for 2016.

Following the results of the works performed no impact of the KOGCF's activity on biodiversity is detected. For purposes of tracking the changes in the biodiversity inhabiting the KOGCF territory, the fauna and flora monitoring is conducted once every three years and will be continued in 2015-2016.

In 2014 no field studies of biodiversity conservation was conducted.

The 2014 activities included development of the Biodiversity Conservation Action Plan for 2015-2016 aiming to track the influence of the KPO's operations on biodiversity and dynamics of species diversity and number of flora and fauna.

In 2015 according to the Biodiversity Conservation Action Plan the scope of work is scheduled to include:

- Mapping of environmental emissions and pollutants content in the soil;
- Studies of species diversity of fauna (mammals, birds, amphibians, reptiles) in the Karachaganak Field with consideration of the KPO operations impact;
- Studies of important species of animals including beavers in the territory of the Konchubai gully and Berezovka river;
- Update of the database of species inhabiting the KOGCF territory subsequent to the results of fauna monitoring.

In 2016 the company is planning to conduct research studies on the KOGCF flora conservation including:

- Flora monitoring in respect of air emissions, physical impact, grazing, impact of the water intake;
- Further monitoring of expansion of the rare Fritillaria ruthenica growing in the territory of the Konchubai gully and Berezovka river.

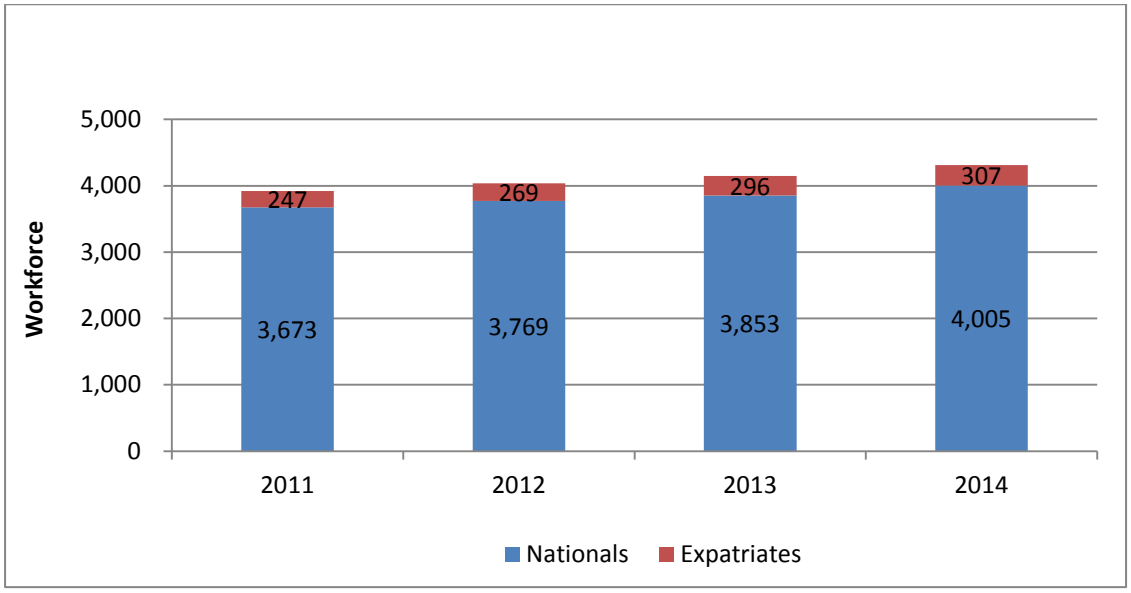
Thousands of skilled, dedicated and talented employees of different specialties, from petroleum engineers and technicians to accountants and logistics are required for the development and operation of Karachaganak Field. Our employees are the key to our success. We develop our personnel by adopting practices of our partner-companies, organizing necessary training and attracting well-known educational institutions.

Table 32. Our targets in personnel development and remuneration

Our 2014 targets	Target achievement	Actions taken in 2014	Targets for 2015
Continue Personnel nationalisation plan to achieve 70% in Category 1 and 95% in Category 2.	Yes	Professional training of local personnel was continued; enhanced development program was implemented	To continue implementation of the Programme for increasing Kazakhstani content in staff for 2015-2020 and achieve 73% in Category 1+2 in 2015
To implement staff retention and motivation measures: To enhance the additional benefits package To adjust salaries to the market level To make the HSE bonus payment	Yes	The salary increase due to inflation and national currency devaluation has been made. The criteria for providing housing and travel compensation for employees residing outside the WKO have been extensively extended. The salary adjustment to the market level has been made in a number of directorates. HSE performance bonus for 2014 was paid to all employees. Additional bonuses were paid to employees of Unit-2 and Unit-3 for significant HSE achievements	To sign new collective agreement with improved conditions for employees To continue the planned adjustment of the personnel salary to the market level
	New target		To review the effectiveness of the company's organizational processes
Continue coaching sessions for 34 participants of the enhanced development program	Yes	Coaches from external organizations were invited to conduct coaching-sessions; participants in conjunction with line managers prepared individual development plans; online application with access for a participant, line manager and trainer for tracking progress on the implementation of the objectives was launched.	

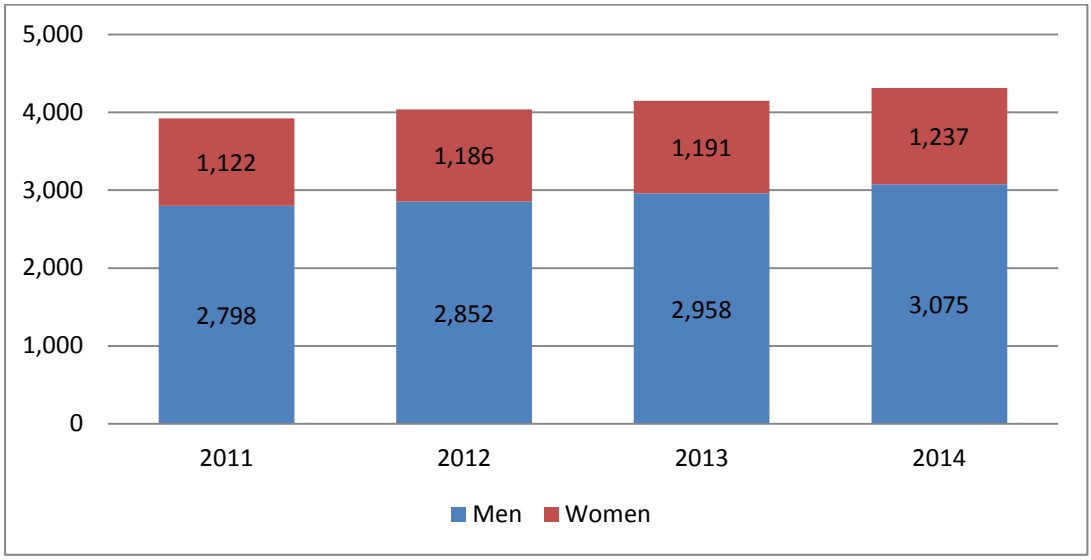
The total number of employees in KPO (within the company and working on temporary projects) at the end of 2014 amounted to 4,312 employees, 4,005 of them are local workers and 307 are expats.

Graph 17. KPO Workforce



Graph 18 shows the employees by gender, 3,075 men and 1,237 women worked in KPO in 2014.

Graph 18. KPO workforce by gender

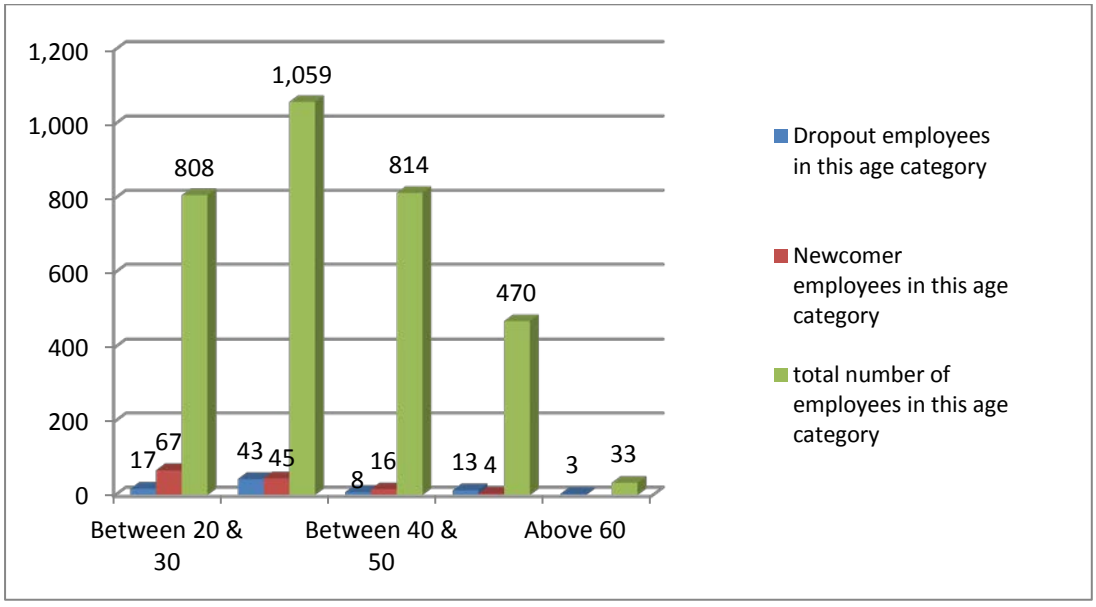


Temporary employees are external market candidates, hired for limited time period to replace the direct employee, who is on unpaid or maternity leave or seconded to one of the parent companies.

The map below shows the percentage of KPO personnel distribution by the region.

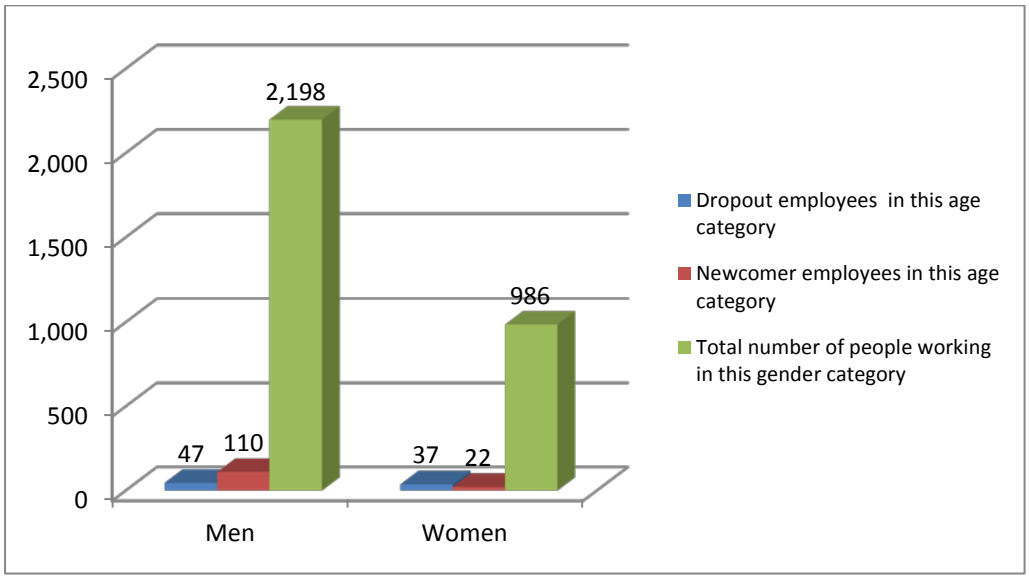
The total number of employees leaving employment and newcomers, by age groups for the reporting period is shown in graph 19. This graph includes employees holding permanent and temporary employment contracts with KPO.

Graph 19. Employee Turnover by age, 2014

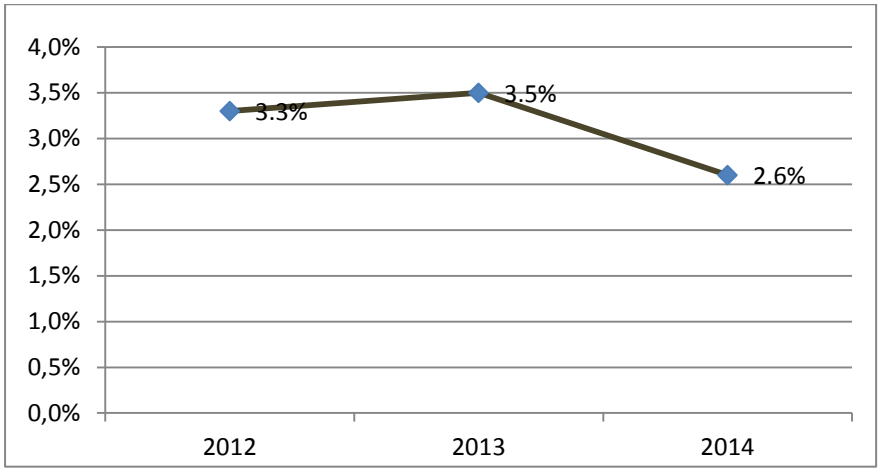


Graph 20 shows the total number of employees who left the company and newly hired employees by gender for 2014. This category includes only employees with direct contract with KPO.

Graph 20. Employee Turnover by gender, 2014



Graph 21. Dynamics of local personnel turnover, 2012-2014



TRAINING AND DEVELOPMENT

Personnel training and development is an actual issue for international oil and gas companies that are facing shortages of qualified personnel and strive to increase the proportion of local content in personnel. Continuous professional growth and development of local employees remains a priority issue for KPO.

Competence management system

Competency modelling was recognized as one of the most relevant methods to determine the requirements for personnel in training and development by KPO leadership.

Competence management system of KPO aims to ensure the necessary level of competence of all company personnel and contracting organizations working in KPO assets or with its equipment to perform their duties in accordance with the required standards.

Competency model development objectives are as follows:

- To create an effective planning tool for training and development of KPO employees with involvement of line managers;
- To identify individual needs of employees in training and development;
- To ensure planning of funds for personnel training and development purposes.

Competence management system of non-technical KPO departments involves an assessment of personnel once every three years on the basis of specially developed competency models.

Personnel assessment or identification of professional development areas (IPDA) is carried out through questionnaires in the online system. On the basis of the results of the IPDA the system generates reports for areas of improvement for each employee for further planning of training and development.

For example, in 2014 personal assessment was performed in such departments as Environmental Management Systems and Human Resource Management.

Next, we present an example of the implementation of competence management system for Production & Maintenance personnel, held on a regular basis.

Case Study 6: Technical personnel competency management

Aim

Increase the level of competence of technical staff

Approach

Competence management system of KPO involves the process of evaluation of technical personnel and accreditation by OPITO, an international organization that promotes standards for training of personnel in the oil and gas industry. In order to ensure effective and sustainable competence management system, the company constantly trains local personnel in accordance with the qualifications of OPITO competence assessor, as well as of OPITO internal supervisor.

Results

In 2013, KPO competence management system was accredited and received a certificate in accordance with the OPITO standards. In October 2014, the annual OPITO audit was held with positive results. 58 national KPO employees received International Certificates from competency appraisers and internal supervisors of the Academy of Oil and Gas OPITO during 2012, 2013, 2014. In 2015-2016, the company plans to hold about 25,340 primary assessments and appoint reassessment process for technical competencies in view of requirements for periodicity. After initial start-up, the system will be implemented in all Company departments with further plans for its implementation in all contracting organizations of KPO.

Note: Initial assessments are the assessments assigned for technical personnel, who pass them for the first time. For each position there is a certain number of evaluations corresponding to the number of standards applicable to this position. With a certain frequency for each standard, employees are subject to reassessments. This means that the total number of assessments assigned to engineering personnel, who pass them for the first time.

Every year KPO implements the training and development plan, including the following:

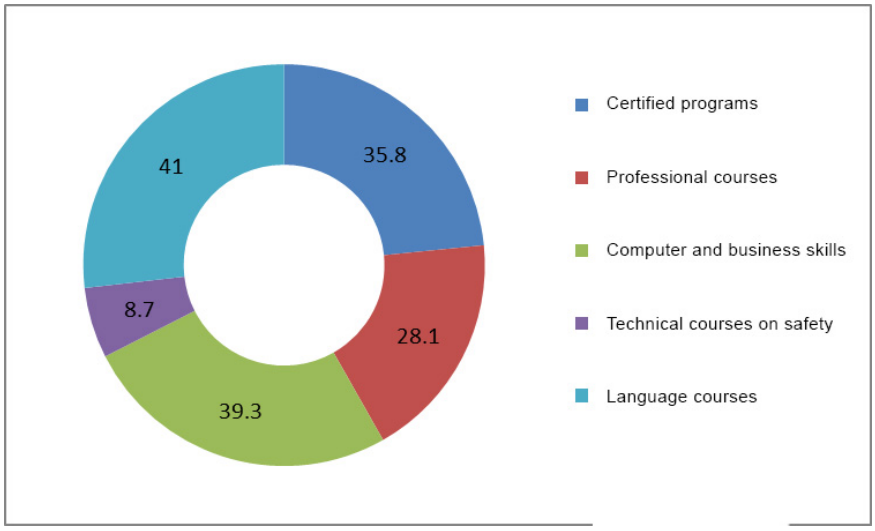
- International qualifications;
- Language training, computer literacy and business skills;
- Professional training;
- Mentoring and coaching in the field of leadership;
- Mandatory training on HSE.

Training and development programs of KPO provide increase of knowledge and experience of employees, considering the strategic plans of parent companies and related personnel needs. They include both mandatory and additional education: trainings, seminars, courses for training and retraining of workers and advanced training at universities, specialized companies and corporate training centres. In addition, we use such methods of personnel development, as mentoring and coaching. The need for professional development is defined both by line managers and on the basis of comprehensive assessments of personnel competence.

In 2014, 444,448.5 hours of training were held, 275,175.5 hours of which were provided to KPO employees. The remaining 169,273 hours were provided to employees of contracting organizations for

compulsory education in the field of HSE. The average number of training hours per employee is shown in the following graph. On average 274 US dollars were spent for training per employee in 2014.

Graph 22. Average number of training hours per employee by type, 2014



Training conducted for company employees in 2014 is displayed in Table 33 divided into categories. 41,269 courses were conducted in total in 2014, 27,459 of them - for employees of contracting organizations. The data are presented in comparison with 2013.

Table 33. Training of employees by categories, 2013-2014

Category	2013	2014
Managers and supervisors	310 persons (64.5 hours per 1 employee)	251 persons (37.8 hours per 1 employee)
Qualified specialists / group leaders	1,988 persons (66.6 hours per 1 employee)	1,873 persons (74.2 hours per 1 employee)
Technical personnel	956 persons (115.3 hours per 1 employee)	1,283 persons (85.4 hours per 1 employee)
Office and administrative personnel	599 persons (15.4 hours per 1 employee)	259 persons (21.7 hours per 1 employee)

Another tool of learning and development in KPO is through increase of participation in international certification programs. The overall KPO strategy is aimed at introducing international practices and technologies. The employees should not only have the necessary skills to operate new equipment or work with new technologies, but also receive the best international knowledge needed to work in the oil and gas industry. At the same time such programs contribute to personal development, employee motivation and loyalty of employees to a company.

Dual education in KPO

Since 2005, KPO practices dual education programs such as training of young specialists at the KPO training centre and program for trainees. This format is aimed at combining theory and practice during the learning process, which allows young specialists master the chosen profession directly at production site.

The main directions of training program for young specialists:

Direction	Specialties
Drilling / well operations, production and processing, geology, development	Production operator, drilling supervisor assistant, process engineer
Mechanics, electrical engineering, instrumentation	Mechanical technician, electrical technician, instrumentation technician, mechanical engineer, electrical engineer, instrumentation engineer
Contracts management, translation studies, HSE	Contracts specialists, trilingual technical translators, HSE specialists

Thus, in 2014, we made a new selection to the program on training of technicians and operators in accordance with the standards of the British Academy of Oil and Gas OPITO, as well as training of drilling supervisors assistants. Seventy-two graduates of higher and secondary National Educational institutions were selected with the potential for further employment in KPO.

16 University graduates of West Kazakhstan Oblast Universities having a qualification of translator completed an intensive training program for professional technical translators from July to November 2014. The training programme was aimed at improvement of knowledge of the oil and gas industry and KPO's terminology, and verbal and written translation skills of the participants. Upon completion of this program in 2014, 10 graduates were employed in KPO.

Coaching

The aim of coaching program is to keep the intellectual capital of the company through the transfer of knowledge and skills. Out of the two existing areas of coaching, professional and managerial, KPO actively uses the managerial coaching for the development of their employees.

Being effective tool for personnel development, coaching is a productive interaction of manager and subordinate aimed at the most effective solution of the problem.

Managerial coaching program of KPO is designed for middle managers who need to develop and motivate employees, improve their performance, optimize the achievement of goals and increase commitment to corporate values.

This approach aims to find the most effective ways to achieve the company's objectives and at the same time solves the issue of employees' development.

Case Study 7: Coaching program

Aim

To develop managerial thinking and apply managerial skills on practice

Approach

Coaching program started in KPO as a pilot project in 2013. Coaching was chosen as one of the tools for development of 54 KPO national employees, included into the list of participants of the Enhanced Employees Development Program. These employees were selected through the evaluation of managerial capacity and motivation to management for further appointment to key managerial positions of the company. Qualified independent professional coachers and business coachers were invited for implementing the program.

Results

Performance and successful implementation of the program indicate to positive changes in the work of participants of the program, resulting in career growth of employees who have received coaching sessions. Out of 54 employees who participated in the coaching program, 21 employees received a promotion on the career ladder, and 24% replacing expatriate staff as part of local content increase in personnel.

DEVELOPMENT OF NATIONAL PERSONNEL

KPO successfully implements the Nationalization Program maximizing opportunities to create jobs for local community and investing in Kazakhstani employees, as this is a solid foundation in the creation of economic heritage of KPO.

The aim of KPO's Nationalization Program is to train highly skilled local employees to fill the positions currently occupied by expatriate staff. That's why continuous professional development and further training of local personnel is one of the company priorities.

The Nationalization Program is applied to KPO's national employees, including the operational staff of the company, except for short-term and long-term projects. The reason for excluding the personnel involved in the above mentioned projects from the Nationalization Program is the limited duration of their employment contracts and the temporary nature of the projects. Personnel of such projects, both expatriate and local, are considered as a temporarily hired staff to perform a certain amount of work within the development and completion of a project. It is expected that after completion of the project, personnel will be transferred to other positions within KPO or released to labour market.

Strategy of increasing local content in personnel reflects these goals and long-term plans of the company. Achieving the goals to increase local content in personnel and at the same time improving the institutional capacities in the field of management depends not only on the knowledge and skills of employees, but also on their managerial skills and experience. In view of this aspect KPO uses the practice of promoting the most talented Kazakhstani employees to managerial positions, including participants of the Enhanced Development Program.

Besides, KPO applies an integrated approach in the development in order to accelerate the process of accumulation and transfer of experience, which in turn speeds up the increase of local content in personnel.

The dynamics of local content growth in personnel reflects any changes in business needs and depends on the initiatives of the company aimed at the design of the future development of Karachaganak Field.

8 positions among senior and middle management and 7 positions among qualified specialists and supervisors were nationalised in 2014. The total percentage of nationalization in KPO was 93%. Indicators by categories are shown in Table 34.

Table 34. Nationalization plan by categories of employees

Category	Description	2013	2014
1	Senior and middle management	68%	70%
2	Professional staff and supervisors	94%	95%
3	Technical staff	100%	100%
4	Support and clerical staff	100%	100%

Due to changes in legislation on attraction of foreign labour force a new Programme for increasing Kazakhstani content in staff for 2015 – 2020 was developed. This program describes the total calculation of Kazakh citizens' proportion in the employees listing:

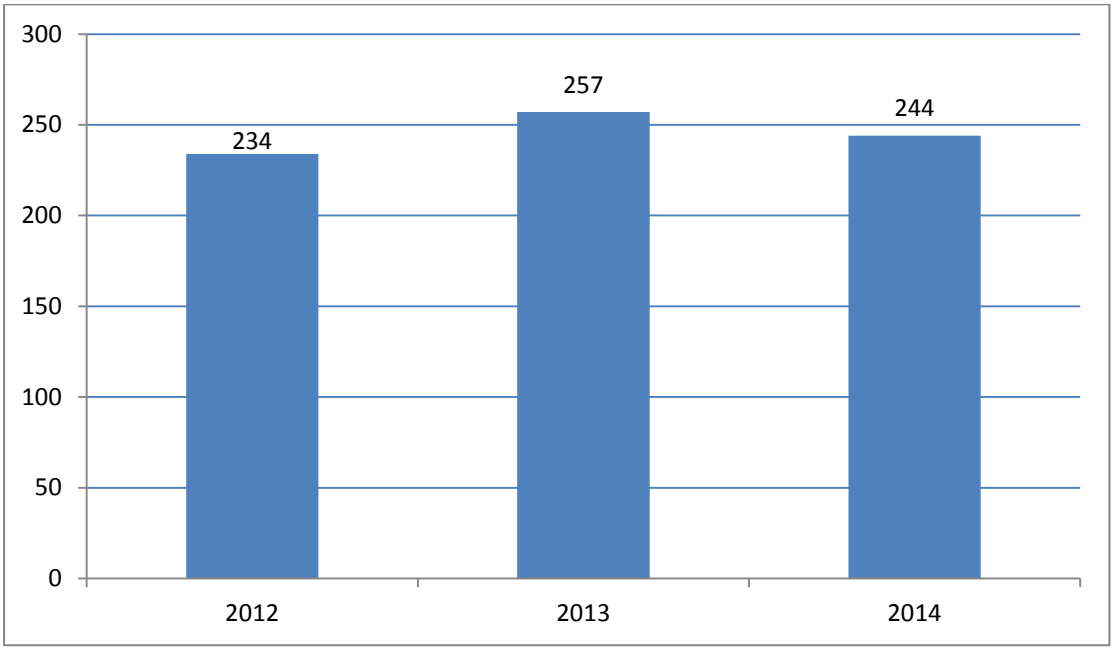
- Employees belonging to the first and second categories - not less than 70%;
- Employees belonging to the third and fourth categories - not less than 90%.

Given the above, starting from 2015, KPO reporting on nationalization will be carried out as follows:

Category	Description
1+2	Executive Management, Department/Unit Management
3+4	Professional Staff / Qualified workers

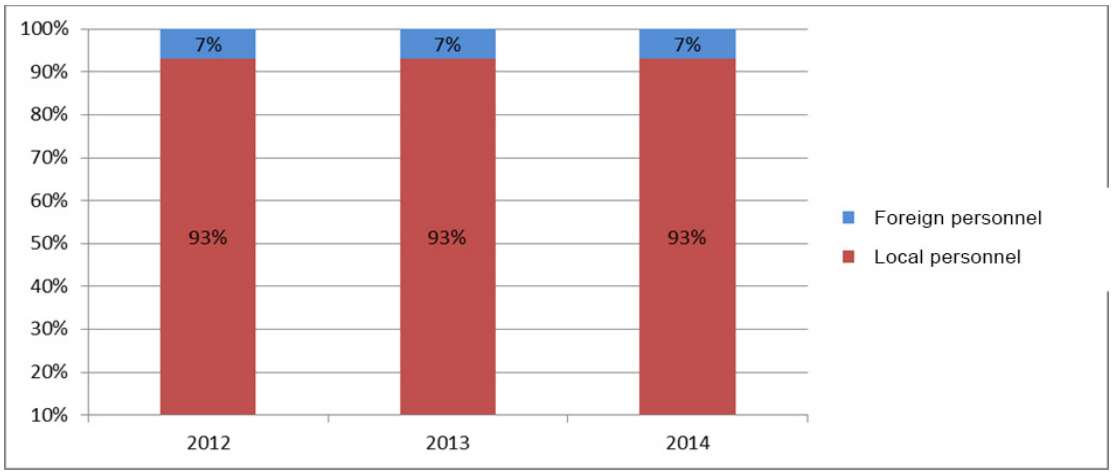
Graph 23 shows the total number of expatriates in KPO (i.e. excluding temporary projects).

Graph 23. Number of expatriate staff in 2012-2014



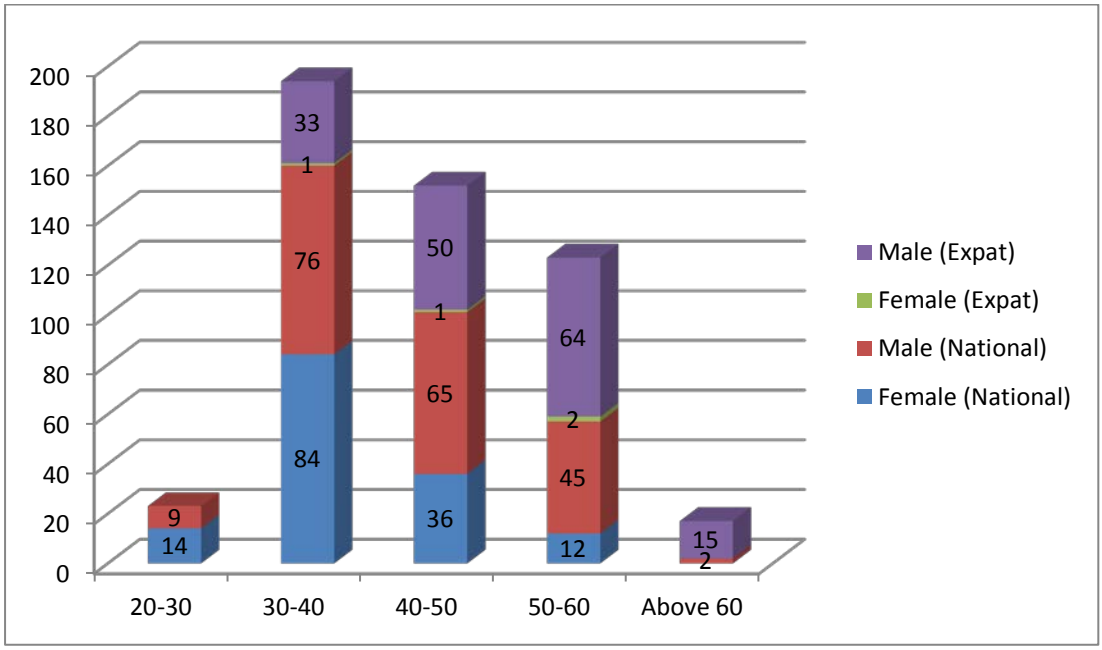
Graph 24 shows data on the number of local and expatriate staff in KPO.

Graph 24. Share of local and expatriate staff in 2012-2014



Graph 25 shows the total number of senior and middle management in the structure of KPO, including principal organization and temporary projects, expatriates and local employees, divided by age groups and by gender.

Graph 25. Number of local and expatriate managers by age and gender category



In accordance with the revised five-year KPO Program on increase of local content in personnel for 2015-2020, the company is focused on the continued implementation of nationalization strategy.

EMPLOYEE RELATIONS

The right of KPO employees to organize trade unions and participate in collective agreements negotiations is fully respected. Trade Unions play one of the key roles in supporting and protecting the rights of employees.

Two Trade Unions operate in KPO, representing the interests of KPO employees. Trade Unions develop drafts of collective agreements including the various aspects of social and labour relations. The provisions of collective agreements apply to all KPO employees regardless of their membership in Trade Unions. The agreements are reviewed every two years.

In accordance with the Collective Agreements signed in 2012, Employer (KPO) shall give minimum 2 months (8 weeks) notice to Trade Unions in the following cases: liquidation of the company with a following reduction in staff; changing the type, system or payment amount, leading to deterioration of employees' condition.

Besides the co-operation with Trade Unions, KPO Employee Relations Section reviews disputes and grievances received through available Grievance mechanisms. The Grievance Mechanisms include an anonymous "Hotline", direct grievances/appeals to HR Controllership and through Trade Unions. The considered grievances in 2014 primarily include issues on salary increase, payment of allowances for accommodation, provision of additional paid leave, and disagreement of employees with the rating for performance development review (PDR) for the reporting period. All received grievances and appeals have been considered and resolved during the year.

Due to insufficient attention to legal compliance in some contracting and subcontracting organizations there is a risk of forced labour and/or violations of workers' rights to hold meetings or collective bargaining. In order to prevent such cases, KPO as the general customer, provides clarification of legal requirements and internal Procedures/Policies to all contractors on a regular basis. For example, currently employees of 14 contracting companies are members of the Karachaganak Trade Union organization of KPO, which is a regional branch of "Gas Industry, Transport and Construction Workers' Trade Union".

In frames of collective agreement, KPO pension plan involves Voluntary Dissolution of Employment Relationship Programme with the provision of benefits for male workers 58-63 years old and female workers 53-58 years old. The program provides a monetary compensation in the amount of monthly gross salary of employees (not including any other payments, bonuses or overtime, etc.) for a period of not less than 6 (six) and not more than 36 (thirty six) months, depending on the age of an employee. The Voluntary Dissolution of Employment Relationship Programme applies to those employees who have indefinite employment agreements with KPO and have been working at the company not less than 10 years. Ten employees of the company applied for the Voluntary Dissolution of Employment Relationship Programme in 2014. In addition, KPO pays financial assistance to workers who have retired from the company on annual basis. This benefit is also reflected in the current collective agreement. Besides, KPO retains health insurance for its pensioners within 3-5 years after retirement.

Health and safety aspects agreed with KPO Trade Unions and covered in the Collective Agreements include the following:

- Developing and implementing HSE procedures;
- Organisation of training courses for employees to take appropriate measures when HSE issues arise;
- Ensuring the sufficient and adequate means of first aid;
- Organization of the regular medical examination of employees;
- Taking measures to reduce fire and other emergency risks at the operational units and ensuring availability of firefighting and rescue equipment for evacuation in the event of fire or any other emergency;
- Provision of free personal protective clothing, special boots, PPE of adequate size and suitable quality;
- Ensuring continuous HSE measures at work places and occupational injury and disease insurance of employees.

COMPENSATIONS AND BENEFITS

During 2014 KPO continued its activities aimed at improving the conditions of hiring, retention and promotion of local personnel. Moreover, KPO annually performs the staff salary reviews.

The social benefits package is provided to all KPO employees. In 2014 the benefits and salary increase plan included the following:

- The general salary increase by 7%, made on January 1 due to the inflation in 2014;
- The total wage increase by 10%, made on March 1 due to the devaluation of the national currency;
- Individual wage increases;
- The annual bonus based on the results of performance and development review 2014;

- Extension of conditions for provision of housing allowance and accommodation in camp; as a result these mentioned benefits cover all local KPO staff constantly residing outside Aksai;
- Payment for Aksai residents to improve the living conditions was introduced since 2014;
- Bonus for achievement of three years without lost time incidents was paid in November to all employees of Unit-2;
- Bonus for achievement of five years without lost time incidents was paid in October to all employees of Unit-3;
- Adjustment of salaries in individual separate units to the market level;
- Bonus for the achievement of safety target on total recordable incident frequency was paid in January 2015 to all KPO employees.

The benefits package is an essential part of employment and it consists of financial and non-financial items. In 2014, KPO benefits included the following:

Financial benefits:

- Year- end Bonus (100% of the monthly basic salary);
- Lump sum payment for health recovery needs (100% of the monthly basic salary);
- Bonus for the RoK Oil and Gas Worker's Day (100% of the monthly basic salary);
- Cash payment for a birth of a child;
- Financial aid for a family of a deceased employee (12 months base salaries and a material aid for funerals);
- Financial aid in case of death of employee's family member;
- Financial assistance in the event of death of a pensioner;
- Social assistance for KPO pensioners;
- The program of training grants for KPO employees;
- Annual payment for health resort treatment of employees;
- Benefit for Afghan War veterans;
- Jubilee bonus to the 50- and 55-year anniversary of women, as well as 50- and 60-year anniversary of men;
- Bonus for International Women's Day ;
- A loyalty allowance for KPO seniority employees on a monthly basis;
- Program of Voluntary Dissolution of Employment Relationship with a provision of benefits for male employees who reached the age of 58 and female employees who reached the age of 53;

- Allowance for improvement of living conditions of workers permanently residing in Aksai;
- Accommodation Allowance to employees residing outside Aksai;
- Accommodation Allowance to employees living in Atyrau, with permanent registration outside Atyrau;
- Accommodation Allowance to employees temporarily transferred to Astana, with permanent registration outside Astana;
- Travel Allowance to employees working on shifts and living outside Aksai;
- Advance payment for social purposes for Company employees in the amount of not more than 4 (four) monthly salaries as per the Company's policy.

Non-financial benefits:

- Accommodation and catering for employees from Aksai with 1-4 grades, with permanent registration outside Aksai;
- Medical insurance for employees and their families including calling an ambulance, treatment of chronic diseases, prenatal care and childbirth, prevention of occupational diseases, dental services. Services are provided in accordance with health insurance contract.
- Free transport to and from work.
- Free meals for employees on the field.
- New Year presents for employees' children aged up to 14 years.
- Additional paid leave is provided to field personnel and engineering staff, for temporary disability, athletes participating in international competitions, studying employees, wedding, and funeral.

KPO has an annual performance and development review procedure to ensure continuous improvement of performance in all aspects of the Company's activities. The performance review procedure applies to all KPO direct employees hired prior the 1st of July and who have worked for at least six calendar months during the year prior to appraisal.

Employees hired in KPO through agencies are covered by collective agreements of these agencies. Separate scheduled payments, including the budget, are agreed between KPO and these agencies.

According to the collective agreement, the minimum wage for young professionals in the company is set at KZT 120,000. The annual comparison showed that the average wage of KPO employees is 2.5 times higher than the average rate in the West Kazakhstan Oblast.

In 2014, as a result of negotiations between the two Trade Unions, KPO management and the competent Authority a decision was taken to pay a social Allowance to the KPO employees permanently residing in Aksai, in order to improve their living conditions, as well as to retain personnel in Aksai. Recalculation on payment of this Allowance was made from April 1, 2014 revising the criteria for payment of Housing Allowance. So, all employees with the workplace in Aksai receive either a housing Allowance or payment for improvement of living conditions depending on the place of permanent residence.

SCHOLARSHIP PROGRAMME AND PARTNERSHIP WITH UNIVERSITIES

KPO continues to enhance its employees' qualification and attract young professionals by cooperation with universities. The information is presented in the form of cases studies below.

Case Study 8: KPO Scholarship

Aim
Improve professional knowledge of national personnel, ensuring their sustainable professional development.

Approach
KPO provides additional funding for the higher education through its Scholarship Programme giving grants to employees and their children. Employees wishing to obtain additional higher education in the area of oil and gas industry, and those having the potential for professional development can apply to participate in this program.

Outcome
Since the beginning of this program in 2002, 191 employees and 375 children of employees received scholarships totalling in $1,715,156. In 2014, 31 employees and 34 children received scholarships totalling in $ 197,656.

Case Study 9: Cooperation of KPO with educational institutions

Aim
Cooperation of KPO with educational institutions to increase the employment opportunities of young specialists at Karachaganak

Approach
Cooperation is carried out through student internship programs, as well as through participation in various student forums and job fairs, which raises the students' awareness of the KPO's employment requirements, and providing advice on how to get an internship or find a job on a chosen speciality in the future. At the same time, participation in such fairs gives an employer the opportunity to communicate with prospective candidates and participate in forums creating a dialogue platform for professionals and students.

Outcome
In 2014, as a result of implementation of student intern program 405 students from 21 educational institutions were on internship on 20 specialties in various departments of the company.

On April 18-19, 2014 the 11th International Youth Oil and Gas Forum was held in the Kazakh National Satpayev Technical University in Almaty. Yerzhan Sadykov and Azat Khouzin made presentation at the forum on behalf of KPO in which they spoke about their experience at the Karachaganak.

On October 21-22, 2014 the students and young scientists of Higher Technical School of Uralsk took part in the "We are the Energy of the Future" National Contest of Innovation and Major Discoveries. Process engineers of KPO Tanat Sultanov and Nurlan Suleimenov took part in competition as experts on oil and gas. In November 2014, representatives of Human Resources Department of KPO participated in job fairs at Nazarbayev University in Astana, and Almaty University of Power Engineering & Telecommunications.

Engaging with local communities

2014

KPO aims to maintain and strengthen good-neighborly relations with the residents of communities located in proximity to KPO operations, providing assistance to local authorities in successful development of their territories. Thus, we are making efforts to prevent or minimize the negative impacts and maximize the benefits from our presence and activities of the company by strengthening engagement with stakeholders and creating opportunities for society development.

Table 35. Our targets in the field of engaging with local communities

Our 2014 targets	Target achievement	Actions taken in 2014	Targets for 2015
Issue the 2014 Social Performance Plan in February 2014, implementing the planned community development programmes by 100% by end of 2014	Yes	The 2014 Social Performance Plan was issued in February 2014 and implemented by 85% due to late award of the contract for design services and non-implementation of the project on construction of sportsgrounds in the rural districts. According to the Plan all the other planned programmes for support of development of local communities in the area of education, health, and culture were fully implemented. A trilateral Memorandum of Cooperation with Burlin Akimat and Maslikhat was signed.	Obtain approval for the 2015 budget for community development programmes within Q1, 2015 and develop a Social Performance Plan for 2015
Hold 16 meetings of the Village Councils in 8 villages of the 5 rural districts located in the vicinity of the Karachaganak Field, covering the issues of community concern and interest	Yes	21 Village Council meetings held with local communities of 5 rural districts of Burlin District located around the Karachaganak Field. The topics of the meetings covered environmental and social programmes of KPO.	Meet with the Village Councils on a quarterly basis to exchange information on KPO activities
Continue monitoring of the Grievance and Suggestions Procedure	Yes	Monitoring of KPO Grievance Procedure was continued throughout 2014. KPO received 25 grievances from local communities during 2014, 23 of which related to smell of gas. All grievances were dealt in accordance with the Procedure providing a timely feedback to local communities.	Continue the monitoring of the KPO Community Grievance and Suggestion Management Procedure.
Issue the 2013 Sustainability Report in line with GRI Guidelines 4	Yes	The 2013 Sustainability Report was issued in line with GRI Guidelines 4.	Issue the 2014 Sustainability Report in line with GRI G4 Guidelines

STRATEGIC APPROACH TO WORK WITH LOCAL COMMUNITIES

The company's engagement with local communities is determined by KPO's social performance standards and procedures, adopted in 2009 in accordance with the International Finance Corporation standards. In our work we pay special attention to residents of communities located in the vicinity to the KPO operational facilities. At the beginning of 2014 KPO issued the Social Performance Plan aimed at alignment of the company's business objectives with government programs and needs of the communities.

The KPO Social Performance Plan involves implementation of programs in education, health, social support of vulnerable community groups (war and labor veterans, the disabled, children with disabilities and facing hardship). Furthermore, the above Plan provides consultation of local communities on environmental issues and research initiated by the latter, geodynamic research, monitoring of grievance and suggestions procedures.

A detailed description of implementation of community development programmes is given at the end of this Chapter.

The Social Performance Plan sets out how we take account of community interests and support community development priorities and helps address possible social risks.

We also aim to contribute to the sustainable social and economic development of local communities and the Republic of Kazakhstan.

CONSTRUCTIVE DIALOGUE

Meetings and consultations are the fundamental basis of KPO activity in the field of corporate social responsibility. A variety of instruments is applied – from official consultative bodies (Village Councils) to public consultations involving local authorities, NGOs and other stakeholders.

Village Councils, representing eight nearby communities in the four rural districts around the Karachaganak Field, were established in 2005 on the basis of a tripartite Memorandum of Understanding between KPO, the Burlin District Akimat and the Maslikhat. The specified Memorandum of Understanding covering the community development programs for 2014 was updated and re-signed on May 12, 2014.

Village Councils are held involving the trusted community representatives of rural districts, local authorities, initiative groups and KPO specialists. Village Councils are held on a regular basis. At these meetings the representatives of the local communities are given the opportunity to discuss their issues, to make suggestions, to lodge a grievance and receive latest information about the current and planned KPO activities. The Village Councils are also held to identify the priorities of KPO social and economic investment for local communities.

The existing dialogue with local communities, in the format of the Village Councils, allows KPO to answer questions, discuss suggestions and initiatives as they arise, as well as develop favorable opportunities both for KPO and local communities.

21 meetings with the Village Councils were held in 2014. At these meetings the members of the Village Councils and KPO Community Relations Department discussed the community development programs.

In particular, in early 2014 KPO specialists presented to the population of each rural district a detailed report on the implementation of the KPO Social Performance Plan for 2013 and discussed the work plan for 2014. Suggestions and requests of the villagers were recorded in relevant Minutes of meetings and were taken into account during the implementation of the KPO Social Performance Plan. As an example, there was a suggestion of Zharsuat villagers to install sanitation equipment in a rural workshop of the Zharsuat school. In December 2014, some plumbing works were carried out for the charitable funds raised by the KPO directors in the "From Dream - to Reality" Moscow Marathon 2014.
In the summer 2014 the employees of the KPO Community Relations Department familiarized the local communities with the 2013 KPO Sustainability Report.

Environmental Survey

Taking into account the local communities concerns and proposals raised at the Village Councils, KPO, jointly with its contractor, presented the interim results of long-term complex environmental survey conducted in Berezovka village for its residents.

Started in 2011 the field studies of the quality of vegetable crops, soil and water, as well as the physiological state of the livestock in Berezovka village were continued in 2014. This project covering the period of 2011-2014 is aimed at monitoring the concentration of pollutants in the components of the environment and agricultural products. The study results show that the environmental conditions of Berezovka village do not differ from those in Dolinnoye village, which was selected as the control settlement and is located at a distance of 80 km from the KPO production facilities.

Geodynamic Studies

Taking into account the local community interest and concerns around the sinkholes formed around the KOGF, in 2014 KPO continued a range of long-term geodynamic studies with the aim to investigate the factors causing the formation of sinkholes. In its 2013 Sustainability Report KPO informed the readers and Berezovka Village residents of the interim results of studies obtained during the period from 2009 and 2013.

The studies made in 2014 showed that the land subsidence processes in the north-eastern area of the field is associated with an intensive discharge of water surplus, supposedly in high-water years. Discharge of water was supposedly carried out during intensive usage of water reservoir for agricultural needs. The indicator of water discharge is a blind creek (erosional dry channel) from water reservoir to sinkholes formation area. At present, the water is not specially discharged from reservoir. It is neglected. But as the channel is already formed, the water can flow spontaneously while reservoir filling or the formed channel can be filled by melt water and then rapid stream can abundantly flow to the lower horizons in the sinkhole area.

PUBLIC CONSULTATIONS

In June 2014, with the support of Akimat of Burlin district, KPO held a public hearing in Aksai where the company introduced its Environmental Protection Measures Plan for the period August-December 2014 and 2015 in Aksai.

KPO's Environmental Protection Measures Plan includes the activities on reduction of greenhouse gas emissions, land reclamation after completion of construction works, reduction of the use of water from

natural sources for technical needs and waste management, air protection, and environmental awareness raising and education. Details about the Plan of activities and its performance results are provided in the Chapter "Caring for the Environment" on pp. 62-63.

The Public Hearing was attended by representatives of regional Maslikhat and Akimat of Burlin district and the Field-adjacent communities, members of the public, local initiative groups and the media.

The participants of public hearing had an opportunity to discuss various issues, including installation of the warning signs around the sanitary protection zone on KOGCF established in 2013, suitability of re-cultivated lands handed over by KPO for state ownership for grazing and crop production.

In general, following the public hearing "The Plan of Environmental Protection Measures for the period August-December 2014" and "The Plan of Environmental Protection Measures for 2015" were approved by the public.

In October 2014, KPO held a public hearing on the project of "Creating a Network of Observation Wells in the Area of KOGCF". The aim of this project is to further develop the system of ground water monitoring of KOGCF and create an observation network for monitoring of ground water of the KOGCF. Creation of such network will help assess the state of ground water of the KOGCF and around SPZ and forecast the condition of the ground water for the future. The project was approved by open voting at the public hearing.

The project and section on EIA underwent an expert review by the WKO Department of Ecology.

DEALING WITH GRIEVANCE AND SUGGESTIONS

KPO has a formal policy in place for handling complaints related to the KPO operational activities. Any resident of the neighbouring villages has the right to raise a complaint, either verbally to a KPO Community Liaison Officer or in writing using dedicated forms and boxes installed in all the villages. Then the company considers a grievance/suggestion and makes a proposal to resolve it.

In 2014, taking into account the lessons learnt in previous years to ensure the effectiveness of its compliance mechanism, KPO reviewed its Grievance Procedure and discussed the proposed changes at the Village Councils. In particular, a provision was added to the procedure stating that the company will send an official letter to the applicant confirming the receipt of the grievance, including a description of the investigation process. As per the previous procedure, KPO Community Liaison specialist met with complainants, presenting the results of the company's investigation.

Communities' complaints about smell of gas in 2014

KPO has robust air quality management systems in place, including stationery air quality monitoring posts installed in each of the 9 Field-adjacent communities. Air samples are taken 4 times a day and sent for laboratory analysis. Samples at these stationery posts are taken by specially trained members of the communities where the posts are installed.

When feeling a smell of gas, community members immediately contact the KPO's Emergency Communications Centre Operator (ECCO) to lodge a grievance and also contact the local stationery post's specialist for an immediate air sampling and sending the samples for the laboratory analysis.

Upon receiving a complaint from a community member, the KPO ECC Operator informs the Field Environmental Monitoring Superintendent, who undertakes the following:

- carries out preliminary collection and analysis of the data on the possible impact of production facilities carrying out the well operations on the occurrence of smell of gas in communities;
- arranges for collection of information on actual concentrations of monitored pollutants from the automatic environmental stations (EMSs) located around the community area from where the grievance came;
- mobilises a Mobile Environmental Monitoring Station (MEMS) to the community for air sampling.

In accordance with the Air Monitoring Process during Hydrocarbons Flaring Procedure, the Flaring Monitoring specialists carry out the under flare monitoring of pollutants taking into consideration the weather conditions. In case of an exceedance of a maximum permissible concentration (MPC) in the Field area or at the boundary of sanitary protection zone, and when a complaint on smell of gas comes from a community, KPO stops the flaring activity.

The air monitoring laboratory results obtained during the under flare measurement, also those obtained from the stationery and mobile EMSs, are analysed for MPC exceedance. Simultaneously, a source of gas smell in a community from where the complaint came is investigated, identifying a possible impact of KPO facilities on occurrence of the smell.

Following the review of all available data an Investigation Report is prepared and provided to Complainants. Upon receipt of such Report, the community member acknowledges the receipt of such Report by signing the relevant form.

In accordance with the KPO's "Community Gas Odour Grievance Procedure", 25 grievances were lodged within 2014, of which 23 were related to smell of gas with most of them coming from the residents of the Zhanatalap and Berezovka Villages (a detailed description of the review process is given further as the text goes). Two complaints out of mentioned 25 were about poor quality of potable water in Berezovka Village and a request for funding a medical treatment of a community member from Bestau Village. All of the grievances were closed appropriately by KPO obtaining the prior agreement of complainants, either by phone or face-to-face meeting.

The details of the registered grievances on smell of gas are given in the table below:

Table 36

Village	Number of grievances	Dates of registration of grievances
Priuralnoe	1	13 January
Zhanatalap	13	14 February 9 March 23 April 13, 16 and 29 October 14, 19, 22, и 26* November 26 and 29 December
Berezovka	7	20 April 17 May 26 July 31 August 5 September 28 November 2 December
Zharsuat	2	17 and 20 August

** Note: November 26, 2 grievances from residents of Zhanatalap village were registered during the day.*

All mentioned grievances about smell of gas were thoroughly reviewed by KPO in 2014 and in accordance with the data from the automated EMS installed at the KOGCF SPZ boundary and in Berezovka Village, the concentrations of monitored components did not exceed the maximum permissible concentration (MPC).

KPO conducts a full-scale environmental monitoring in accordance with the program of industrial environmental control (IEC). For more information, see chapter "Caring about the Environment", including the results of the monitoring stations on the atmosphere and the concentration of gases in the air.

Illnesses of schoolchildren in Berezovka village

In November 2014, 23 schoolchildren and 3 teachers in the village of Berezovka, located approximately five kilometres from the Karachaganak field, fainted and were hospitalised in the Burlin district hospital. Some NGOs and media closely followed the incident and alleged that pollution from KPO was the cause. The issue received coverage in the national and regional media.

The national and regional governments have commissioned investigations into this incident. KPO fully cooperated with the government investigations. The preliminary government investigation found that there was no evidence that the emissions from KPOs operations were the cause of the illnesses affecting people in the village of Berezovka. Besides, a criminal investigation initiated by the Law Enforcement authorities of the Republic of Kazakhstan, including the toxicological, forensic and environmental examinations at the time of publication of the present report were ongoing and the findings will be known on completion of the said investigation.

Furthermore, a special Working Group was set up by the Order of the RoK Ministry of Energy to study potential extension of the sanitary protection zone for Karachaganak Field due to potential implementation of upgrade and development projects. This process is currently ongoing and the results of the Working Group's work will be disclosed in the next year's sustainability report.

Following the incident, a new environmental monitoring station was installed by the WKO authorities in Berezovka in December 2014. KPO remains committed to achieving the highest standards of environment and safety performance and compliance with applicable regulations.

A grievance to the Organization for Economic Cooperation and Development (OECD)

In July 2013, a complaint against KPO was filed under the OECD Guidelines for Multinational Enterprises, claiming that KPO had caused damage to the environment and public health. The complaint is being handled by the UK National Contact Point for the OECD Guidelines, see the 2013 Sustainability Report at http://www.kpo.kz for more information. The UK National Contact Point dismissed many of the claims in the complaint, apart from those related to two properties located within the boundary of the sanitary protective zone around the KPO's facilities. In 2014, KPO participated in a mediation process, convened by the UK National Contact Point. The mediation process is ongoing.

Cooperation with local authorities on Community preparedness

KPO continues to actively engage with the communities and the authorities in order to ensure coordination and effective response in the event of an emergency situation. Communication and Public Information systems were installed in 9 villages where approximately 6,000 residents live. The systems control is maintained 24 hours a day by KPO.

KPO closely cooperates with local authorities, civil defence and process safety regional departments to ensure community protection. KPO and Burlinkyi District Akimat developed the Joint Community Evacuation Action Plan in order to protect the population in case of an emergency situation.

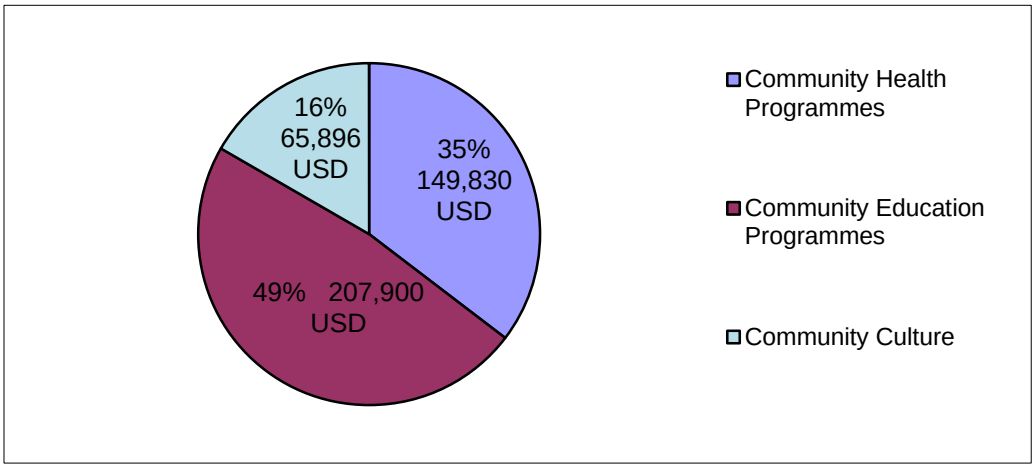
Throughout 2014 the scheduled monthly tests of the community Emergency Notification Station were held by KPO Emergency Response specialists, using the alarm system. Besides, regular meetings and sessions were held to notify Rural Districts' Akims, responsible officers in villages, farm units and the community about the procedures of communities' notification in the event of potential emergency. In total 1148 people attended such meetings.

Meetings with 357 community members residing in 60 communities located along the Karachaganak – Bolshoy Chagan – Atyrau Export Pipeline were held by KPO Emergency Response & Community Preparedness specialists in cooperation with the representatives of local communities' authorities to explain and notify on emergency response key issues.

To ensure all emergency response systems remain effective, regular exercises are held in each of the villages according to the set notification and evacuation plans. As per the recommendations of Regional Emergency Situations Department of Burlinskyi district Akimat particular attention is given to the residents of communities living in the immediate vicinity of the Field and taking into account their trans-boundary location.

COMMUNITY DEVELOPMENT PROJECTS

Graph 26. Local community development programs in 2014



Improving livelihoods is a key aspiration for the communities around Karachaganak, and KPO strives to be supportive of these aims, complementing the efforts of the local authorities and contributing to the long term economic development.

Through the Village Councils, the communities propose projects that aim to improve the basic social infrastructure of the villages and their social life. KPO then evaluates the proposals received, assessing their alignment with the community needs, overall priority, technical feasibility and the associated budget.

The KPO initiatives implemented in 2014 to support the local communities in the area of healthcare, education and arts, presented as follows:

Social support to elderly and children

One of the most important projects implemented in the framework of the social support for the local community is the arrangement of health resort treatment and recreation for pensioners and summer camps for schoolchildren living in the villages around the Karachaganak field (Berezovsky, Uspenovsky, Zharsuatsky, Priuralny, Pugachevsky rural districts of the Burlin district).

In 2014, KPO provided vouchers to "Akzhaiyk Sanatorium for 200 pensioners and veterans of War and Labour in Burlin District. 160 schoolchildren from the above mentioned rural districts, spent 10 days in the Talap Summer Camp in Uralsk.

Honoring of veterans on Victory Day

Since 2003 it has become a good tradition at KPO to congratulate and present gifts to the War veterans and their widows, who live in the villages around the Karachaganak Field.

In 2014, on the 69th Anniversary of the Victory Day, KPO donated 17 food baskets to the veterans of war and their widows. The event was attended by KPO representatives and local communities' authorities.

Education

KPO's social performance programmes for local communities are also aimed at development of local youth. Compared to charity donations, long-term investment into the human capital helps addressing the strategic goals of the business, whilst supporting the economic growth of local communities.

Case Study 10: Scholarship Programme for community youth

Aim
Support the Burlin District authorities in issues related to the lack of qualified specialists in the area of education, healthcare and agriculture.

Approach
Burlin District communiites face shortage of qualified teachers, medical doctors, nurses and agricultural specialists. Considering this need, KPO initiated and developed a scholarship programme aimed at providing a higher education to school-leavers from the 4 rural districts (Berezovski, Uspenovski, Zharsuatski and Priuralnoye). The programme is implemented with support of Burlin District Education Department.

The main selection criteria are that children come from socially disadvantaged families and they have to work out in Burlin District for two years after graduation from the West Kazakhstan Oblast institutions.

Outcome
Two of the four students selected for the Programme in 2010 have successfully graduated the institutions and are working in their community.

In 2014 upon graduation from the West Kazakhstan Humanitarian Academy Arthur Kussumkulov was employed to Zharsuat Village School as a teacher of physical training

In 2013 Nuikin Dmitry obtained a qualification of electrical technician in the West Kazakhstan Engineering College and since September 2013 has been working in LLP "MSS KIP-Avtomatic".

English Language Programme

Knowledge of English helps the youth gain education and develop career in various areas: industry, business, diplomatic career, culture, international tourism, science and IT. This also provides access to employment and improves quality of life. To date, different media provide an unlimited access to information, 80% of which is in English.

Given the needs of local schoolchildren in additional classes in English, KPO continued funding the English Language classes for local schoolchildren in 2014. Extra-curricular classes were provided in six schools of Aksai and 5 villages of Burlin District located around the Karachaganak Field.

Case Study 11: Professional development of English teachers of Burlin district

Aim
Improvement of the English language skills of the Burlin District teachers and Introduction of advanced methods of teaching

Approach
In 2014 considering the training needs of Burlin District teachers of English involved in KPO's English Language Training Programme for local schoolchildren KPO initiated their training courses.

KPO funded training of 20 English Language Teachers in Burlin District and implemented the programme in partnership with the British Council.
The British Council conducted a needs assessment of teachers and developed a comprehensive programme for training with the introduction of advanced teaching methodology.

An important aspect of the training was mentoring and coaching provided by the British Council's experts who helped the learners get a timely feedback on methods of teaching and monitor their progress.

The classes were provided by a native user of English from the British Council and the programme was successfully completed at the end of 2014.

Outcome
Following the successful completion of the courses all 20 participants received the British Council's Certificates.

Partnership with Public Foundations

As a responsible business KPO is keen in establishing partnerships with local public organisations to implement its Social Performance Programmes aimed at supporting socially disadvantaged groups of local communities.

Case Study 12: Zhas Daryn Public Foundation

Aim
Provide assistance to a Public Foundation of the Burlin District in implementing the programmes aimed at integration of disabled children facing hardship

Approach
In 2011 KPO provided funding for opening of Zhas Daryn Public Foundation in the Burlin District to protect the rights of children at the age from 7 to 16 years with special needs and facing hard reality situation.

Significant support in institutional development and capacity building of this Public Foundation was provided by one of KPO's partner companies, BG Kazakhstan.
Over 2012-2014 with BG Kazakhstan's funding a number of workshops were organised for local non-commercial organisations, including Zhas Daryn, aimed at building skills in project management, making business plans, fundraising activities, etc.

Outcome
In August 2014 with KPO's sponsorship support the Zhas Daryn PF opened an Arts Studio at School #3 of Aksai for children with special needs. This project was broadly supported by Burlin District Akimat, Maslikhat and the Education Department. Within 2014 similar Arts Studios were opened at Schools of Kanai, Kentubek and Zharsuat of Burlin District. Competitions like "I take a pencil in my hand", the plain air sessions in Bumakol Village and trips to Art Exhibitions in Aksai, Uralsk, training for social tutors and other events took place.

Being the largest organization and employer in the West Kazakhstan oblast, KPO cooperates with a great number of contractors, significantly contributing to the economic development of the region and Kazakhstan, in general.

SUPPLY CHAIN

KPO activities in the procurement of goods and services are carried out in accordance with approved tender procedures and the Final Production Sharing Agreement (FPSA). Procurement is carried out through tenders following the principles of competitiveness, objectivity and confidentiality.

The information provided below briefly describes KPO activity on contractual work and procurement.

Procurement planning process includes program development, covering procurement needs, providing an opportunity to define a strategic plan of detailed activities in terms of expenses and cost savings, target reserves and quality. Contracting strategy is aimed at identifying the required actions to ensure efficient satisfaction of procurement needs for KPO departments in compliance with regulations and policies.

The category and vendor management system is aimed at implementation of contractual work and procurement in compliance with KPO requirements in terms of ethical principles, local content and financial stability.

The process of requisitioning begins with a KPO department's inquiry to the Contract and Procurement Department (C&P) with the request to start the procurement process aiming to receive goods and/or works and/or services.

The phase of tendering and awarding covers the processes applied for processing user requests for procurement by identifying suitable suppliers to be invited to participate in a tender, by the analysis of received proposals, as well as by contract awarding and conclusion.

Hereinafter, the process of contract management and administration defines roles and responsible parties for contract execution, including a contract holder, contract administration specialist, and participants from C&P department.

The final feedback review on the contractor's performance provides an assessment of contractual performance, including the quality of services rendered, commercial management, HSE, cooperation with KPO, etc. The review provides a possibility to update and revise a qualification status of the supplier.

Since the beginning of the Karachaganak project development and up to end of 2014, 7,174 potential suppliers of goods, works and services have been registered in the KPO Vendor database. In total, 437 companies were registered in 2014, 204 of which were assessed for ethical due diligence.

According to the 2014 results KPO placed 1,933 contracts and amendments worth over USD 1.70 bln. Contracts and amendments have been awarded to more than 655 suppliers, of which 383 (58%) are local vendors (registered in the Republic of Kazakhstan) and 272 (42%) are foreign ones.

According to the procurement categories in 2014, KPO signed 1,234 contracts for supply of goods worth over USD 447 mln and 699 contracts for provision of services worth more than USD1.261 bln.

We attract a large number of contractors to perform the major works and services at Karachaganak, including construction, drilling operations, transportation and maintenance services.

Of the total number of contracts for delivery of goods the main categories include: tubular products, compressors, various valves, flow wellhead equipment, heat exchangers, electrical equipment and spare parts to all the above listed equipment.

Major contracts for provision of services include the following types: construction, catering services, maintenance and repair of gas re-injection compressors at Unit 2, maintenance and repair of gas turbine station at KPC, logistics and freight forwarding services, drilling and well operations, recruitment services, security services, and ancillary services during scheduled shutdown activities, etc.

Major contracts for provision of services in 2014 were signed with the companies registered in Kazakhstan, as noted above. However, the geography of the countries, with which contracts for supply of goods and services have been signed, is quite diverse. Besides Kazakhstan, these are Italy, UK, France, Hungary, Germany, UAE, Russia, USA, Netherlands, Czech Republic, etc.

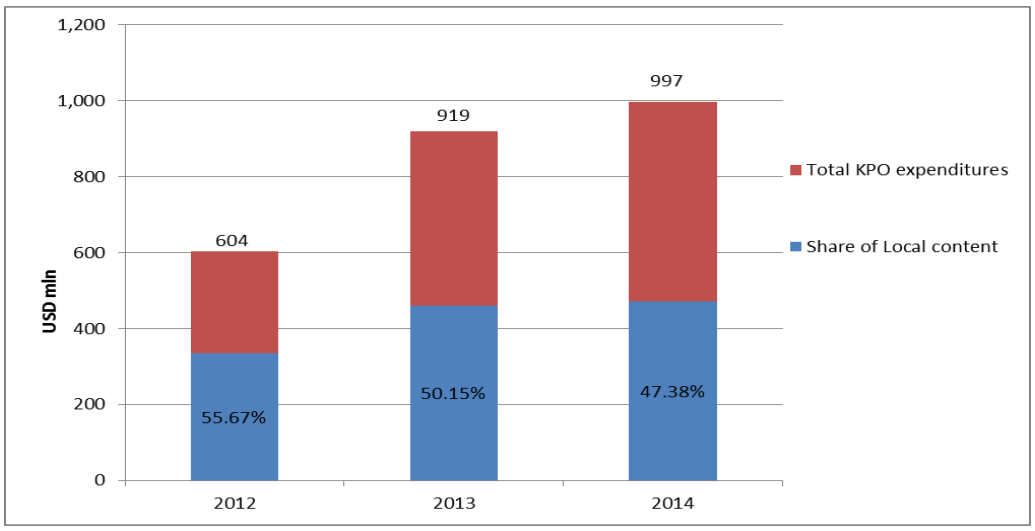
LOCAL CONTENT DEVELOPMENT

Since the beginning of the Karachaganak field development KPO has been actively working towards the local content enhancement aiming at reduction of import and increase of domestic goods, works and services in the total scope of goods, works and services procured by the Karachaganak partners for operations in Kazakhstan.

For the purpose of transparency of procurement activity, KPO publishes the annual, medium and long-term plans for procurement of goods, works and services on its website. This allows local companies developing their own strategies to meet high needs and requirements of KPO, as the major employer in the region.

In 2014, the local content share in the Karachaganak project made up to 47.38% (USD 472 mln), as shown in the graph below.

Graph 27. Share of Local content out of total KPO expenditures, 2012 - 2014.



General reduction of Local content in 2014 compared to 2013 arises from an overall increase of expenses for company's production needs to support the Karachaganak field development.

The Karachaganak field is one of the most unique and world's largest oil and gas condensate fields, where world class technologies are introduced for development and production of oil and gas condensate. The use of equipment of foreign manufacture is determined by the high technological and design requirements of the production process. Spare parts, such as flanges, fittings, valves, etc. manufactured by Kazakhstani companies are not technologically applicable for replacement in such equipment. Supply of spare parts for the equipment installed in the Karachaganak Field is made by foreign manufacturers.

In 2014, the costs for Kazakhstani manufactured goods used in auxiliary works, which were the main sources of Local content in goods in 2013, were reduced.

Besides, such a reduction occurred due to increased costs of works performed in well operations and technical services carried out for petroleum operations. These works are executed by Kazakhstani branches of foreign companies and are not the sources of local content.

Moreover, the devaluation of Tenge was a significant factor contributing to the reduction of local content share affecting the difference in exchange rate as compared to 2013.

Cooperation with oil and gas companies in Kazakhstan

Efficient cooperation with domestic market remains vital for all oil and gas companies in Kazakhstan. To ensure the highest possible level of Local content, the largest enterprises in the industry cooperate in different spheres of activities.

Aktau Declaration on Joint Actions of oil and gas operators

In the previous reports we outlined the initiatives, which had been launched in the framework of the Aktau Declaration on Joint Actions signed between the oil and gas operators in 2012 to consolidate individual programs of operators, investors and state authorities into a single initiative for the development of national production. The participants in this initiative - Tengizchevroil LLP, North Caspian Operating Company, KPO and the National company "KazMunayGas" JSC - continued cooperation in 2014 achieving some results on the issue of creation a single vendor registration database.

The idea of creation of a single suppliers' registration database was supported by operators on conditions of compliance with the requirements and the standards of operators. A single database will make it possible to simplify and reduce costs associated with the process of finding suppliers. However, in terms of effectiveness, the database should be extensive and satisfy the needs of all stakeholders.

In September 2014, the operators made a decision on cooperation with the Achilles Company, which provided information management services about suppliers and launched the "First Point of Kazakhstan" as a service provider to manage a single suppliers' database in oil and gas sector.

As part of this work, standardization of the requirements in the process of supplier registration in the database was implemented. Considering that each operator has its own distinctive procedures of suppliers' preliminary qualification, local companies have to collect a package of documents for each of the three projects, that causes additional inconvenience.

In 2014, a unified Registration Questionnaire form for suppliers' database was developed and approved by all the operators, based on the comparison of the three operators' requirements and revision of internal procedures. KPO was among the first to start using the unified Registration Questionnaire form starting from the third quarter of 2014.

Localization of production and transfer of new technologies

It is critical for KPO to support continuous development of local companies, as well as to facilitate their capacity building, competency improving and ensuring their compliance with the international standards applied in oil and gas industry.

Production localization projects imply a mutually beneficial cooperation between foreign and local manufacturers, stimulate domestic investment growth, provide new jobs creation and have a positive impact on the socio-economic development of the region. Two examples of such projects are given hereunder.

Case Study №13: Aksai Industrial Park (AIP)

Aim

Development of local production of goods and materials in demand on a long-term basis in oil and gas industry by supporting and creating necessary conditions for international companies interested in partnership with the Kazakhstani enterprises.

Approach

The project was developed to meet the needs of KPO and national market for goods and services. Opportunities and potential of local production for further development were estimated at the initial stages of the project implementation. Aksai Industrial Park (AIP), which was established in June 2012, is a pilot project implemented by private companies in the industrial zone of Aksai in the framework of local content development initiatives to ensure the transfer of 'know-how' from international leading companies to Kazakhstani enterprises.

AIP is the centre of high technologies within the socio-economic infrastructure of the West Kazakhstan Oblast located in proximity to major large fields, such as Karachaganak, Tengiz and Kashagan. AIP provides an infrastructure for direct cooperation of local contractors with their Western partners to establish production of goods and services.

Result

On 28 March 2014, a Memorandum of Understanding between KPO and Aksai Industrial Park LLP was signed to establish joint intentions for further development of local content. Cooperation implies joint activities on the basis of a roadmap for a number of works in demand by KPO. As a result, 8 contracts for provision of the following types of goods, works and services worth USD 45 mln were signed:

1. Laboratory installation;
2. Equipment repair;
3. Valves repair;
4. Equipment calibration;
5. Valves improvement program;
6. Materials verification;
7. Mechanical parts;
8. Pipe inspection and cleaning techniques.

Case Study №14: Construction of a thread-cut plant in Aktau by Tenaris Global Services Kazakhstan Ltd.

Aim

Increase in the local content share in procurement of goods and transfer of 'know-how' technologies to the Republic of Kazakhstan

Approach

To support Kazakhstan Government initiatives for the development of production and service clusters, and taking into consideration possible growth of demands for the Karachaganak Expansion projects, KPO and its partner companies in the Karachaganak project approved the implementation of a joint agreement on generation of investment for the development of local capacity and transfer of up-to-date technologies. These activities contribute to further growth of industrial sector in the region through localization of high technological production and creation of new jobs.

Result

In July 2014, during the visit of the Head of Kazakh Government to Aksai, KPO and "Tenaris Global Services Kazakhstan Ltd" signed an agreement to provide assistance in construction of the plant of pipe thread-cut lines in Aktau.

Tenaris Global Services Kazakhstan Ltd" reported the implementation of the following activities in 2014:

- Verification of the project for compliance and registration of the participant of the special economic zone;
- Registration of a new Kazakh company "Kazakhstan Pipe Threaders LLP";
- Awarding of the contract for detailed engineering, topographic and geological works in the amount of USD 1.2 mln to a local company, as well as the permission for construction of the plant of pipe thread-cut lines in Aktau.

According to the schedule, the project execution is estimated to last until end 2015.

ENERGY RESOURCES SUPPLIES TO THE WEST KAZAKHSTAN OBLAST

In compliance with the FPSA terms and conditions, KPO supplies 20 MW of electrical power to WKO residents. In 2005, KPO constructed and put into operation the fourth generator at the KPC Gas Turbine Power Plant (GTPP), which made it possible to supply up to 45-48 MW of electrical power to the regional network, once the company's own operational needs in power supply have been met.

Currently KPO produces and supplies electrical power to "AksaiEnergo" LLC and "Batys Energy Resources" LLP for subsequent deliveries to WKO consumers.

In 2014, in response to requests of the management and electrical power supply organizations of the region, KPO continued to supply electrical power to WKO thanks to simultaneous operation of all four generators at the KPC GTPP.

In addition to the above, in response to the request of the WKO administration and JSC 'Western Kazakhstan Regional Electricity Company' (REC) in 2014, KPO supported the project on upgrading the regional electrical power grid by allocating funds worth over KZT 326 mln. In recent years the low reliability of the WKO REC old electrical power grids caused frequent power outages, affecting Karachaganak field activities.

The upgrade process was planned in two phases with the first one being implemented in 2014. It provided for a partial equipment upgrade and a replacement of the old equipment with new one with better specifications. This resulted in the stable performance and improved the reliability of the power grids of the WKO REC.

Fulfilment of the second upgrade phase is planned in 2015. The second phase program includes an increased scope of work on the overhead lines and substations.

Electrical power supply by KPO to the regional network, depending on the time of the year, makes up from 30 to 40% of the total electric power consumption of the WKO which is a significant contribution to the economy of the region. Besides, the cost of electricity produced by KPO is much lower than the cost of electricity generated by other energy producers, due to which the total cost of electrical power in the WKO is maintained at the same level. In 2014, the company produced in total 345.5 GWh of electrical power for supply to the WKO network, including 40.8 GWh for "AksaiEnergo" LLP and 304.7 GWh for "Batys Energy Resources" LLP.

In 2014, the supply of fuel gas for electrical power generation at the KPC GTPP for WKO consumers amounted to 114.3 mscm.

Table 37. Supply of fuel gas and electrical power by KPO in 2014

	2012	2013	2014
KPO fuel gas use for WKO supply, mscm including:	130.4	98.7	114.3
▪ Direct sales to "KazTransGazAimak" (KTGA)	19.8	0.0	0.0
▪ Use of power generation for WKO	110.6	98.7	114.3
Electricity provided to WKO, GWh	350.4	325.9	345.5

SUPPORTING SOCIAL INFRASTRUCTURE

Under the terms of Annex 5 to the FPSA, in the period from 1998 to 2009, KPO had been annually allocating USD 10 mln for social infrastructure projects agreed with West Kazakhstan Oblast (WKO) Akimat identifying the list of priorities of social development. Over the years of its activity, KPO built and repaired a number of new schools and kindergartens, hospitals, stadiums, the swimming pool, the skating rink, theatres, Regional Philharmonic Hall, the Celebration Palace, hundreds of kilometres of moto-roads, and housing and utilities infrastructure facilities in the West Kazakhstan Oblast.

In 2009, the Joint Operating Committee (JOC) made a decision to increase the annual funding for social infrastructure projects, by doubling the amount to USD 20 mln per year for social and infrastructure projects in the WKO.

In addition, in 2014, it was decided to allocate an additional annual funding of USD 10 mln exclusively for social and infrastructure projects in Burlin district of the WKO during the period from 2014 to 2016.

In accordance with Annex 5 of the FPSA, in case of failure to implement the projects by the end of the year, unspent funds are carried over for the next calendar year. This fact explains the larger amounts shown in the tables hereinafter.

The basis for social projects implementation is the JOC Resolution, which establishes the list of social projects approved between the WKO Akimat and KPO. KPO is responsible for project design, procurement and management of the whole process up to completion of construction and the subsequent handover of to the Republic of Kazakhstan. All social projects are to be implemented by local companies. The list of social projects done in 2014 is provided hereunder in Table 38.

KPO Social Projects internal committee established in 2012 continued working within 2014. The aim of the Committee is to ensure transparency and participatory decision-making during the process of selection of social projects identified for the town of Aksai and the Burlin District. The Committee comprises of KPO national staff residing in Aksai.

Table 38. Social and infrastructure projects implemented by KPO in 2014

Social projects in Uralsk		
Project name / status	**Project description**	**Budget (mln USD) ***
Completion of construction of the Tennis Complex *The project completed*	The tennis complex includes four indoor and four outdoor tennis courts, including spectator stands for 300 seats. An administrative building of the complex is fully equipped and furnished.	10.9
Construction of Arts Centre after Kadyr Mirza-Ali *The project progressed by 84%.*	The Arts Centre will host meet-the-artist sessions and events: concerts, performances of masters of arts, exhibitions of art works. Also, the project covers a library with collection of works of poets and writers of the region.	5.5

Road maintenance along the Sarayshyk street *The project progressed by 31%.*	The project includes maintenance of the existing roadway pavement and construction of a new one, repair of sidewalks in Sarayshyk street, one of primary streets in Uralsk.	2.4
Road maintenance along the Syrym Datov street *The project progressed by 16%.*	The project includes repair of pavement in Syrym Datov street and the bridge across the Ural river, reconstruction of original riding grade of the pavement and repair of guard rails and sidewalks.	3.9
Road maintenance from Yessenzhanov street to Derkul village *The project progressed by 52%.*	The project covers the reconstruction of the auto-road and the bridge across the Chagan river in Yessenzhanov street to the overhead road in the village of Derkul. This road section refers to local roads with access to the primary streets.	5.1
Renovation of the pedestrian bridge over Chagan river in the Park of Culture and Recreation *The project progressed by 69%.*	The bridge in the Culture and Recreation Park will provide a pedestrian traffic across the Chagan river.	0.5
Construction of an access road to the kindergarten in Samal street *The project completed*	Construction of the road is intended to provide safe and convenient access to the kindergarten designed for 350 children in Samal residential district, Uralsk.	0.4
	Total	**28.7**

Social projects in other districts of WKO		
Project name / status	**Description**	**Budget (mln USD) ***
Construction of Cultural Centre for 200 visitors in Kaldygayty (Sulykol village) of Karatobe district *The project completed*	The complex is designed for cultural and festive events in Kaldygayty village of Karatobe district. The Culture Centre is fully equipped and delivered on a turn-key basis.	2.2
Construction of a kindergarten for 290 children in Zhanibek district *The project progressed by 49%.*	The kindergarten is designed as a two-storey building for 290 children, and will include 13 play grounds with sunshades and gaming equipment, sport ground and garden plot. The building planned to be fully equipped and furnished on a turn-key basis.	3.65
	Total	**5.85**

* *The amounts are VAT including.*

Working towards sustainable development, KPO continues implementing social and infrastructure projects. In 2015, WKO plans to carry out a number of new projects, including the construction of the Palace of Youth and Schoolchildren in Uralsk, the construction of a library in Uralsk, major repairs of roads in Uralsk and Aksai of Burlin district, the second stage of general improvement and landscaping of the right bank of the Chagan river in the Uralsk Culture and Recreation park, etc.

All these projects are aimed at achieving sustainable development and well-being for the benefit of local communities and the Republic of Kazakhstan, as a whole.

GRI Content Index

KPO 2014 Sustainability Report meets the requirements of the 'Core' option of the Global Reporting Initiative's (GRI) Guidelines 4. The table below demonstrates our disclosures of indicators against the 'Core' option.

GENERAL STANDARD DISCLOSURES			
General Standard Disclosures	**GRI Indicator description**	**Page**	**External Assurance**
STRATEGY AND ANALYSIS			
G4-1	Statement from the most senior decision-maker of the organization (such as CEO, chair, or equivalent senior position) about the relevance of sustainability to the organization and the organization's strategy for addressing sustainability	Letter from General Director (p.2), Executive Summary (pp.3-5)	✓
G4-2	Description of key impacts, risks, and opportunities	Risk Management (p.25), Letter from General Director (p.2), Executive Summary (pp.3-5)	✓
ORGANIZATIONAL PROFILE			
G4-3	Name of the organization	Our Commitment to Sustainable Development (p.1)	✓
G4-4	Primary brands, products, and services	Our Products and Export Routes (pp.8-9), 2014 Operations (p.10)	✓
G4-5	Location of the organization's headquarters	Feedback (back cover), Operations and Projects (p.6)	✓
G4-6	Number of countries where the organization operates	Operations and Projects (pp.6-9)	✓
	Names of countries where either the organization has significant Operations and Projects or that are specifically relevant to the sustainability topics covered in the report	Operations and Projects (pp.6-9)	✓
G4-7	Nature of ownership and legal form	Corporate Governance (pp.22-25)	✓
G4-8	Markets served (including geographic breakdown, sectors served, and types of customers and beneficiaries)	Our Products and Export Routes (pp.8-9)	✓

G4-9	Scale of the organization, including: Total number of employees	People are Our Asset (p.92)	✓
	Total number of Operations and Projects	Karachaganak operating facilities in 2014 (pp.6-8)	✓
	Net sales (for private sector organizations) or net revenues (for public sector organizations)	Not reported due to FPSA confidentiality restrictions	✓
	Total capitalization broken down in terms of debt and equity (for private sector organizations); and	N/A	✓
	Quantity of products or services provided	2014 Operations (p.10)	✓
G4-10	Total number of employees by employment contract and gender	People are Our Asset (p.92)	✓
	Total number of permanent employees by employment type and gender	People are Our Asset (p.92)	✓
	Total workforce by employees and supervised workers and by gender	People are Our Asset (p.92)	✓
	Total workforce by region and gender	People are Our Asset (pp.92-93)	✓
	Whether a substantial portion of the organization's work is performed by workers who are legally recognized as self-employed, or by individuals other than employees or supervised workers, including employees and supervised employees of contractors	No	✓
	Any significant variations in employment numbers (such as seasonal variations in employment in the tourism or agricultural industries)	N/A	✓
G4-11	Percentage of total employees covered by collective bargaining agreements	Employee Relations (p.102)	✓
G4-12	Description of the organization's supply chain.	Supply Chain (pp.118-119)	✓
G4-13	Significant changes during the reporting period regarding the organization's size, structure, ownership, or its supply chain.	No significant changes	✓

G4-14	Explanation of whether and how the precautionary approach or principle is addressed by the organization	2014 HSE Plan (pp.38-40), 2015 HSE Improvement Plan (p.40), HSE Cards Programme (pp.41-43), Asset Integrity Management (pp.45-49)	✓
G4-15	Externally developed economic, environmental and social charters, principles, or other initiatives to which the organization subscribes or which it endorses.	Strategic Approach to Work with Local Communities (p.108)	✓
G4-16	Memberships in associations (such as industry associations) and national or international advocacy organizations in which the organization: * Holds a position on the governance body; * Participates in projects or committees; * Provides substantive funding beyond routine membership dues; * Views membership as strategic	Membership in Associations (p.18)	✓
IDENTIFIED MATERIAL ASPECTS AND BOUNDARIES			
G4-17	List all entities included in the organization's consolidated financial statements or equivalent documents. Report whether any entity included in the organization's consolidated financial statements or equivalent documents is not covered by the report.	This Report covers the Operations and Projects of the KPO B.V. Branch in Kazakhstan	✓
G4-18	Process for defining the report content and the Aspect Boundaries	Material Aspects (pp.19-21)	✓
	Explanation of how the organization has implemented the Reporting Principles for Defining Report Content	Material Aspects (pp.19-21)	✓
G4-19	List all the material Aspects identified in the process for defining report content.	Material Aspects (pp.19-21)	✓
G4-20	For each material Aspect, report the Aspect Boundary within the organization, as follows: Report whether the Aspect is material within the organization	Material Aspects (pp.19-21), Executive summary (pp.3-5)	✓

G4-21	For each material Aspect, report the Aspect Boundary outside the organization, as follows: Report whether the Aspect is material outside of the organization. If the Aspect is material outside of the organization, identify the entities, groups of entities or elements for which the Aspect is material.	Material Aspects (pp.19-21)	✓
	Description of the geographical location where the Aspect is material for the entities identified	Operations and Projects (p.6)	✓
G4-22	Explanation of the effect of any restatements of information provided in previous reports, and the reasons for such restatements.	None	✓
G4-23	Significant changes from previous reporting periods in the Scope and Aspect Boundaries	No significant changes	✓
STAKEHOLDER ENGAGEMENT			
G4-24	List of stakeholder groups engaged by the organization	Stakeholder Engagement (pp.15-18)	✓
G4-25	Basis for identification and selection of stakeholders with whom to engage	Stakeholder Engagement (pp.15-18)	✓
G4-26	Approach to stakeholder engagement, including frequency of engagement by type and by stakeholder group, and an indication of whether any of the engagement was undertaken specifically as part of the report preparation process.	Stakeholder Engagement (pp.15-18).	✓
G4-27	Key topics and concerns that have been raised through stakeholder engagement, and how the organization has responded to those key topics and concerns, including through its reporting.	Stakeholder Engagement (pp.15-18), Key issues raised by local communities are presented in the chapter 'Engagement with Local Communities' (pp.108-117)	✓
	Report the stakeholder groups that raised each of the key topics and concerns	Material aspects (pp.19-21)	✓

EXECUTIVE SUMMARY			
G4-28	Reporting period (such as fiscal or calendar year) for information provided	Executive Summary (p.3)	✓
G4-29	Date of most recent previous report (if any)	Executive Summary (p.3)	✓
G4-30	Reporting cycle (such as annual, biennial)	Executive Summary (p.3)	✓
G4-31	Contact point for questions regarding the report or its contents	Feedback (back cover)	✓
G4-32	Report the 'in accordance' option the organization has chosen	Executive summary (p.3)	✓
	Report the GRI Content Index for the chosen option	GRI Content Index, (p.128)	✓
	Report the reference to the External Assurance Report, if the report has been externally assured	Assurance Statement, (pp.142-143)	✓
G4-33	Organization's policy and current practice with regard to seeking external assurance for the report.	Executive summary (p.3)	✓
GOVERNANCE			
G4-34	Governance structure of the organization, including committees of the highest governance body. Identify any committees responsible for decision-making on economic, environmental and social impacts	Organization and Governance Structure (pp.22-24)	✓
ETHICS AND INTEGRITY			
G4-56	Organization's values, principles, standards and norms of behavior such as codes of conduct and codes of ethics.	Compliance Framework (pp.27-28)	✓
G4-57	Report the internal and external mechanisms for seeking advice on ethical and lawful behavior, and matters related to organizational integrity, such as helplines or advice lines.	Hotline and other compliance measures (pp.28-29)	✓

G4-58	Report the internal and external mechanisms for reporting concerns about unethical or unlawful behaviour, and matters related to organizational integrity, such as escalation through line management, whistleblowing mechanisms or hotlines.	Hotline and other compliance measures (p.28-29), Employee Relations (p.102)	✓	
SPECIFIC STANDARD DISCLOSURES				
DMA and Indicators	**GRI Indicator description**	**References and comments**	**Omissions**	**External Assurance**
ECONOMIC				✓
Economic performance	DMA	Aspect covers KPO; Supporting Social Infrastructure (p.125)		✓
G4-EC4	Financial assistance received from government	No assistance received		✓
Market presence	DMA	Aspect covers KPO; Development of National Personnel (pp.99-102)		✓
G4-EC5	Ratio of standard entry level wage by gender compared	Compensations and Benefits (p. 105)		✓
G4-EC6	Proportion of senior management hired from the local community at significant locations of operation	Development of National Personnel (pp.100 -102)		✓
Indirect Economic Impacts	DMA	Aspect covers KPO; Supporting Social Infrastructure (pp.125-127)		✓
G4-EC7	Development and impact of infrastructure investments and services supported	Social and infrastructure projects implemented by KPO in 2014 (pp.125-127)		✓
G4-EC8	Significant indirect economic impacts, including the extent of impacts	Local Content Development (pp.119-123)		✓
Procurement Practices	DMA	Aspect covers KPO; Report on Local Content is presented in the 2013 Sustainability Report (pp. 84-85)		✓

G4-EC9	Proportion of spending on local suppliers at significant locations of operation	Local Content Development, Chart on Share of Local Content (p.120)		✓
Reserves				✓
G4-OG1 (partially)	Volume and type of estimated proved reserves and production	Operations and Projects (p.6)		✓
ENVIRONMENTAL PERFORMANCE				✓
Energy	DMA	Aspect covers KPO; Table 24. Our energy management targets (p.77), Implementation of Energy management system (p.78), Energy audit (p.78)		✓
G4-EN3	Energy consumption within the organization	Electric power consumption (pp.78-79)		✓
G4-EN5	Energy intensity	Electric power consumption (pp.78-79)		✓
Water	DMA	Aspect covers KPO; Implementation of the Environmental Protective Measures Plan for 2014 (pp.62-64)		✓
G4-EN8	Total water withdrawal by source	Water Resources (p.81)		✓
G4-EN9	Water sources significantly affected by withdrawal of water	Water withdrawal does not significantly affects the water sources		✓
G4-EN10	Percentage and total volume of water recycled and reused	Water Resources (pp.81-82), Table 28. Secondary use of treated wastewater (p.82)		✓
Biodiversity	DMA	Aspect covers KPO; Implementation of the Environmental Protective Measures Plan for 2014 (pp.62-64), Biodiversity (pp.89-90)		✓
G4-EN11	Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas	Biodiversity (pp.89-90)		✓

G4-EN12	Description of significant impacts of activities, products, and services on biodiversity in protected areas and areas of high biodiversity value outside protected areas	No significant impacts, see Biodiversity (pp.89-90)		✓
G4-EN13	Habitats protected or restored Report the size and location of all habitat protected areas or restored areas, and whether the success of the restoration measure was or is approved by independent external professionals.	Implementation of the Environmental Protective Measures Plan for 2014 (p.62-64),		✓
G4-EN14	Total number of IUCN red list species and national conservation list species with habitats in areas affected by Operations and Projects , by level of extinction risk	See Biodiversity in the Sustainability Report 2013 (p.63)		✓
Emissions	DMA	Aspect covers KPO; Implementation of the Environmental Protective Measures Plan for 2014 (pp.62-64), Air Emissions (pp.64-66)		✓
G4-EN15	Direct greenhouse gas (GHG) emissions	Direct greenhouse gas emissions (pp.72-73)		✓
G4-EN16	Energy indirect greenhouse gas (GHG) emissions	Indirect greenhouse gas emissions (pp.73-74)		✓
G4-EN18	Specific Greenhouse gas (GHG) emissions	Specific greenhouse gas emissions (pp.74-75)		✓
G4-EN19	Reduction of greenhouse gas (GHG) emissions	Reduction of GHG emission (p.76)		✓
G4-EN21	NOx, SOx, and other significant air emissions	Air Emissions (pp.64-65)		✓
Effluents & Waste	DMA	Aspect covers KPO; Implementation of the Environmental Protective Measures Plan for 2014 (pp.62-64)		✓
G4-EN22	Total water discharge by quality and destination	Discharges of treated wastewater (p.83)		✓

G4-EN23	Total weight of waste by type and disposal method	Waste Management (pp.85-86)		✓
G4-EN24	Total number and volume of significant spills	Spills (p.89)		✓
G4-EN25	Weight of transported, imported, exported, or treated waste deemed hazardous under the terms of the basel convention annex I,II,III, and percentage of transported waste shipped internationally	KPO does not have any imported or exported wastes		✓
OG6	Volume of flared and vented hydrocarbon	Gas Flaring (pp.66-68)		✓
OG7	Amount of drilling waste (drill mud and cuttings) and strategies for treatment and disposal	Waste Management (p.89)		✓
Compliance	DMA	Aspect covers KPO; Executive summary (pp.3-5)		✓
G4-EN29 (partially)	Monetary value of significant fines and total number of non-monetary sanctions for noncompliance with environmental laws and regulations	Executive summary (p.4)		✓
Overall	DMA	Aspect covers KPO; Implementation of the Environmental Protective Measures Plan for 2014 (pp.62-64), HSE Management system (p.34)		✓
G4-EN31	Total environmental protection expenditures and investments by type	Implementation of the Environmental Protective Measures Plan for 2014 (p.63)		✓
Environmental grievance mechanisms	DMA	Aspect covers KPO; Dealing with Grievance and Suggestions (p.110)		✓

G4-EN34	Number of grievances about environmental impacts filed, addressed, and resolved through formal grievance mechanisms	Dealing with Grievance and Suggestions (pp.111-112)		✓
LABOR PRACTICES AND DECENT WORK				
Employment	DMA	Aspect covers KPO; Employee Relations (pp.102-105)		✓
G4-LA1	Total number and rates of new employee hires and employee turnover by age group, gender and region	People are Our Asset (pp.93-94)		✓
G4-LA2	Benefits provided to full-time employees that are not provided to temporary or part-time employees, by significant locations of operation.	Compensations and Benefits (pp.103-105)		✓
Labor / Management relations	DMA	Aspect covers KPO; Employee Relations (pp.102-103)		✓
G4-LA4	Minimum notice periods regarding operational changes, including whether these are specified in collective agreements	Employee Relations (p.102)		✓
Occupational Health and Safety	DMA	Aspect covers KPO and its contractors; Management systems (p.25), HSE Management system (p.34), HSE Plan for 2014 (pp.38-40)		✓
G4-LA5	Percentage of total workforce represented in formal joint management–worker health and safety committees that help monitor and advise on occupational health and safety programs	HSR Engagement and Communication (p.41)		✓
G4-LA6	Type of injury and rates of injury, occupational diseases, lost days, and absenteeism, and total number of work-related fatalities, by region and by gender	Safety Performance (pp.34-38), Graph 6 (p.52), Fitness for task assessment and health surveillance (p.55-56)		✓

G4-LA7	Workers with high incidence or high risk of diseases related to their occupation.	Management of Health Risks (p.53)		✓
G4-LA8	Health and safety topics covered in formal agreements with trade unions	Employee Relations (p.102-103)		✓
Training and Education	DMA	Aspect covers KPO; Training and Development (pp.95-102), Compensations and Benefits (pp.103-105), Scholarship programme and partnership with universities (p.106)		✓
G4-LA9	Average hours of training per year per employee by gender, and by employee category	Training and Development (p.97)	Data are not provided by gender as it is considered not viable	✓
G4-LA10	Programs for skills management and lifelong learning that support the continued employability of employees and assist them in managing career endings	Scholarship programme and partnership with universities (p.106)		✓
G4-LA11	Percentage of employees receiving regular performance and career development reviews, by gender and by employee category	Compensations and Benefits (p.105)		✓
Diversity and Equal Opportunity	DMA	Aspect covers KPO; Development of National Personnel (pp.99-102)		✓
G4-LA12	Composition of governance bodies and breakdown of employees per employee category according to gender, age group, minority group membership, and other indicators of diversity	Development of National Personnel (p.102)		✓
Diversity and Equal Remuneration	DMA	Aspect covers KPO; Code of Conduct (pp.27-28), Employee Relations (p.102-103)		✓

G4-LA13	Ratio of basic salary and remuneration of women to men by employee category, by significant locations of operation	Basic salaries are established for employee categories regardless of gender, and so basic salaries for women and men are equal.		✓
Labor Practices Grievance Mechanisms	DMA	Aspect covers KPO; Corporate Governance (pp.28-29), Employee relations (p.102)		✓
G4-LA16	Number of grievances about labor practices filed, addressed, and resolved through formal grievance mechanisms	Employee Relations (p.102)		✓
HUMAN RIGHTS				
Investment	DMA	Aspect covers KPO; Code of conduct and anti-corruption awareness and training (p.28)		✓
G4-HR2	Total hours of employee training on human rights policies or procedures concerning aspects of human rights that are relevant to operations, including the percentage of employees trained.	Code of conduct and anti-corruption awareness and training (p.28)		✓
Freedom of Association and Collective bargaining	DMA	Aspect covers KPO; Employee Relations (pp.102-103)		✓
G4-HR4	Operations and suppliers identified in which the right to exercise freedom of association and collective bargaining may be violated or at significant risk, and measures taken to support these rights	Employee Relations (p.103)		✓
Security Practices	DMA	Aspect covers KPO; Security (pp.58-59)		✓
G4-HR7 (partially)	Percentage of security personnel trained in the organization's human rights policies or procedures that are relevant to operations	Security (p.59)		✓
Human Rights Grievance Mechanisms	DMA	Aspect covers KPO; Hotline and other compliance measures (pp.28-29), Employee Relations (p.102)		✓

G4-HR12	Number of grievances about human rights impacts filed, addressed, and resolved through formal grievance mechanisms	Employee Relations (p.102)		✓
SOCIAL PERFORMANCE				
Local Communities	DMA	Aspect covers KPO; Engaging with local communities (p.108)		✓
G4-SO1	Percentage of operations with implemented local community engagement, impact assessments, and development programs	All KPO departments implement programs of engagement with local communities. Engaging with local communities (pp.113-114)		✓
Anti-corruption	DMA	Aspect covers KPO and its contractors; Code of conduct and anti-corruption awareness and training (pp.27-28)		✓
G4-SO4	Communication and training on anti-corruption policies and procedures	Code of conduct and anti-corruption awareness and training (pp.27-28)		✓
Public policy	DMA	Aspect covers KPO; Strategic approach to work with local communities (p.108)		✓
G4-SO6	Total value of political contributions by country and recipient/beneficiary	No contributions		✓
Grievance Mechanisms for Impacts on Society	DMA	Aspect covers KPO; Dealing with grievance and suggestions (p.110)		✓
G4-SO11	Number of grievances about impacts on society filed, addressed, and resolved through formal grievance mechanisms	Dealing with grievance and suggestions (p.111-112)		✓

Emergency Preparedness	DMA: mechanisms used to involve local communities in the development of emergency plans, response to an incident, trainings.	Aspect covers KPO; Health, Safety, Security and Asset Integrity: Emergency management (p.44); Item III of 2014 HSE Plan 'Process Safety and Risk Management' (p.39); Engaging with local communities: Cooperation with local authorities on community preparedness (p.113)		✓
Asset Integrity and Process Safety	DMA: Asset integrity and process safety procedures, investigation results of potential incidents.	Aspect covers KPO; Health Safety Security and Asset Integrity (p.45-49)		✓
G4-OG13 (partially)	Report procedures for assuring asset integrity as an essential element of safe operations. Report on the application of nationally and internationally accepted asset integrity and process safety disciplines. The emphasis of asset integrity and process safety is to prevent unplanned releases that could result in a major incident. Report processes for identifying, reporting, management review and follow-up on investigation results of near-accidents; these are also referred to as near misses or potential accidents.	Asset Integrity Management (p.45-49)		✓

Building a better working world

Independent Assurance Report on the Karachaganak Sustainability Report 2014 of Karachaganak Petroleum Operating B.V.

To the management and stakeholders of Karachaganak Petroleum Operating B.V.

Identification and description of the subject matter

At the request of Karachaganak Petroleum Operating B.V. (hereinafter 'KPO') we have performed a limited level assurance on the qualitative and quantitative information disclosed in the 'Karachaganak Sustainability Report 2014' (hereinafter 'the Report').

Identification of the criteria

The criteria of our engagement were the Global Reporting Initiative's Sustainability Reporting Guidelines version G4 (hereinafter 'the GRI G4 Guidelines'), sustainability reporting principles of KPO which are identical to the reporting principles contained in the GRI G4 Guidelines as set out in the section 'Executive summary' on page 3 of the Report, and the KPO Sustainable Development Charter which is available at KPO's corporate website. We believe that these criteria are appropriate given the purpose of our assurance engagement.

Management's responsibilities

The management of KPO is responsible for implementation of sustainability-related policies and procedures in accordance with the KPO Sustainable Development Charter, and the preparation of the Report and the information therein in compliance with the GRI G4 Guidelines. This responsibility includes designing, implementing and maintaining internal controls relevant to the preparation of a sustainability report that is free of material misstatements, selecting and applying appropriate reporting principles and using measurement methods and estimates that are reasonable in the circumstances.

Our responsibilities

Our responsibilities are to independently express a conclusion that:

- Sustainability performance summary information and data included in the Report, in all material aspects, provide reliable and sufficient representation of sustainability policies, activities, events and performance of KPO in 2014,
- The reporting processes related to the information and data collection on key performance indicators regarding human resources, environment, health and safety, national content of the goods and services purchased, charity and social investments are in place and are compliant with relevant principles of the GRI G4 Guidelines,
- Sustainability related policies and procedures corresponding to the KPO Sustainable Development Charter, and described in the Report, exist,
- The Report is prepared 'in accordance' with the GRI G4 Guidelines using the Core option.

Summary of work performed

Our engagement was conducted in accordance with International Standard on Assurance Engagements (ISAE) 3000, *Assurance Engagements Other than Audits or Reviews of Historical Financial Information*, issued by IFAC, and accordingly included the following procedures:

- Analysis of KPO's sustainability related policies and procedures, as described in the Report,
- Interviews with relevant KPO's managers and key personnel responsible for preparing sustainability related information, implementation of KPO sustainability related policies and procedures, relevant activities and performance,
- Benchmarking of the Report against sustainability reports of selected international peers of KPO,
- Review of a selection of corporate and external publications with respect to KPO's sustainability policies, activities, events, and performance in 2014,
- Identification of material issues based on the procedures described above and analysis of identified material issues' reflection in the Report,
- Review of data samples for selected key performance indicators regarding human resources, environment, health and safety, national content of the goods and services purchased, charity expenditure, and social investments, as well as reporting processes to assess whether these data are collected, prepared, collated and reported appropriately,

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- Visit to KPO's main office to conduct interviews, and also to Eco Centre and Gas turbine power plant to observe health, safety and environmental aspects of production operations,
- Visit to two environmental monitoring stations, one within Sanitary protection zone and one station in the nearby village Berezovka in order to confirm the air monitoring procedure,
- Collection on a sample basis of evidence substantiating the sustainability performance summary information and data, included in the Report, and existence of policies and procedures corresponding to the directions listed in the KPO Sustainable Development Charter and described in the Report,
- Assessment of compliance of the Report and the underlying reporting processes with relevant sustainability reporting principles of the GRI G4 Guidelines used by KPO, and
- Assessment of compliance of information and data disclosures in the Report with the requirements of the Core option of reporting 'in accordance' with the GRI G4 Guidelines.

We believe that our procedures provide a basis on which we can provide limited assurance. Our evidence gathering procedures are more limited than for a reasonable assurance engagement, and therefore less assurance is obtained than in a reasonable assurance engagement.

Conclusions

Based on our work described in this report, nothing has come to our attention that causes us to believe that:

- The sustainability performance summary information and data included in the Report, in all material aspects, do not provide reliable and sufficient representation of sustainability policies, activities, events and performance of KPO during 2014 in accordance with the GRI G4 Guidelines and the KPO Sustainable Development Charter.
- The reporting processes related to the information and data collection on key performance indicators regarding human resources, environment, health and safety, national content of the goods and services purchased, charity, and social investments are not in place and not compliant with relevant principles of the GRI G4 Guidelines.
- Sustainability related policies and procedures corresponding to the KPO Sustainable Development Charter and described in the Report, are not existent.
- The Report is not prepared 'in accordance' with the GRI G4 Guidelines using the Core option.

Almaty

XX.05.2014

AIP	Aksai Industrial Park
BAT	Best available techniques
bln	billion
BOE	Barrels of oil equivalent
CH_4	methane
C_nH_m	Methane hydrocarbons
CO_2e	Carbon dioxide equivalent
CO	Carbon oxide
ConCom	Contractors' Committee
Contractor/Contracting or Parent companies	Refers to BG, eni, Lukoil, Chevron and KazMunaiGaz National Company
CP	Contract and Procurement
CPC	Caspian Pipeline Consortium
DMA	Disclosure of Management Approach
ECC	Emergency Communications Centre
EIA	Environmental Impact Assessment
EITI	Extractive Industries Transparency Initiative
EMS	Environmental Monitoring Station
EOPS	Early Oil Production Satellite
EPMP	Environmental Protective Measures Plan
EY	Ernst & Young Advisory LLP
FAB	Field Administration Building
FDP	Field Development Program
FEED	Front End Engineering Design
FPSA	Final Production Sharing Agreement
GHG	Greenhouse Gas
GOR	Gas Oil Ratio
GPI	General purpose incinerator
GRCS	Gas Reinjection Compression Station
GRI	Global Reporting Initiative
GTPP	Gas Turbine Power Plant
GWh	Gigawatt-hours
GWP	Global warming potential
HC	Hydrocarbon
H_2S	Hydrogen sulphide
HP	High pressure
HR	Human Resources department
HRA	Health Risk Assessment
HSE	Health, Safety and Environment
HSE MS	Health, Safety and Environment Management System
IPCC	Intergovernmental Panel on Climate Change
ISO 14001	Internationally accepted standard that sets out requirements for putting in place an effective Environmental Management System
J	joule
JMC	Joint Marketing Committee
JOC	Joint Operating Committee

JPC	Joint Procurement Committee
JSC	Joint Stock Company
KATS	Karachaganak-Atyrau Transportation System
KEP	Karachaganak Expansion Project
KGDBN	KPC Gas Debottlenecking Project
KMG	KazMunaiGas
KOGCF	Karachaganak Oil and Gas Condensate Field
KOTS	Karachaganak-Orenburg Transportation System
KPC	Karachaganak Processing Complex
KPO	Karachaganak Petroleum Operating B.V. Kazakhstan Branch
kt	kiloton
KZT	Kazakhstan tenge
LLP	Limited Liability Partnership
LLC	Limited Liability Company
LTI	Lost Time Injury
LTIF	Lost Time Injury Frequency
Mboe	Millions of barrels of oil equivalent
mg	milligram
mln m^3	million cubic meters
MPC	Maximum permissible concentrations
MPD	Maximum permissible discharges
Mscm	Million standard cubic metres
MW	Megawatt
NGO	Non-governmental organisation
NO_x	Nitrogen oxide
OECD	Organisation of Economic Cooperation and Development
IOGP	International Association of Oil and Gas Producers
OHSAS 18001	Internationally recognised assessment specification for occupational health and safety management systems
OPITO	Offshore Petroleum Industry Training Organization
OpCom	Operating Committee
OPS	Oil Pumping Station
P&M	Production & Maintenance
PEC	Production Environmental Control
PF	Public Foundation
PPE	Personal Protection Equipment
Pre-FEED	Preliminary Front End Engineering Design
PSIM	Process Safety & Integrity Management
QRA	quantitative risk assessment
REC	Regional Electricity Company
RKI	Rotary Kiln Incinerator
RMS-Y	Remote Manifold Station
RoK	Republic of Kazakhstan
RTI	Road Traffic Incident
RSS	Rotary Steerable Systems
SD	Sustainable development

SMS	Security Management System
SO_2	Sulphur dioxide
SPZ	Sanitary Protection Zone
TCCF	Thermo-Mechanical Cuttings Cleaning Facility
TRI	Total Recordable Incident
TRIF	Total Recordable Injury Frequency
UAE	United Arab Emirates
UK	United Kingdom
USA	United States of America
USD	United States Dollars
VPSHR	Voluntary principles on security and human rights
WAED	Western Area Early Development
WKO	West Kazakhstan Oblast

FEEDBACK

We are open to feedback from all our stakeholders. We believe this will facilitate improving our performance.

If you have any comments to this edition or wish to contribute to the Sustainability Report 2015, please email us at
sustainability@kpo.kz.

KPO Sustainability

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