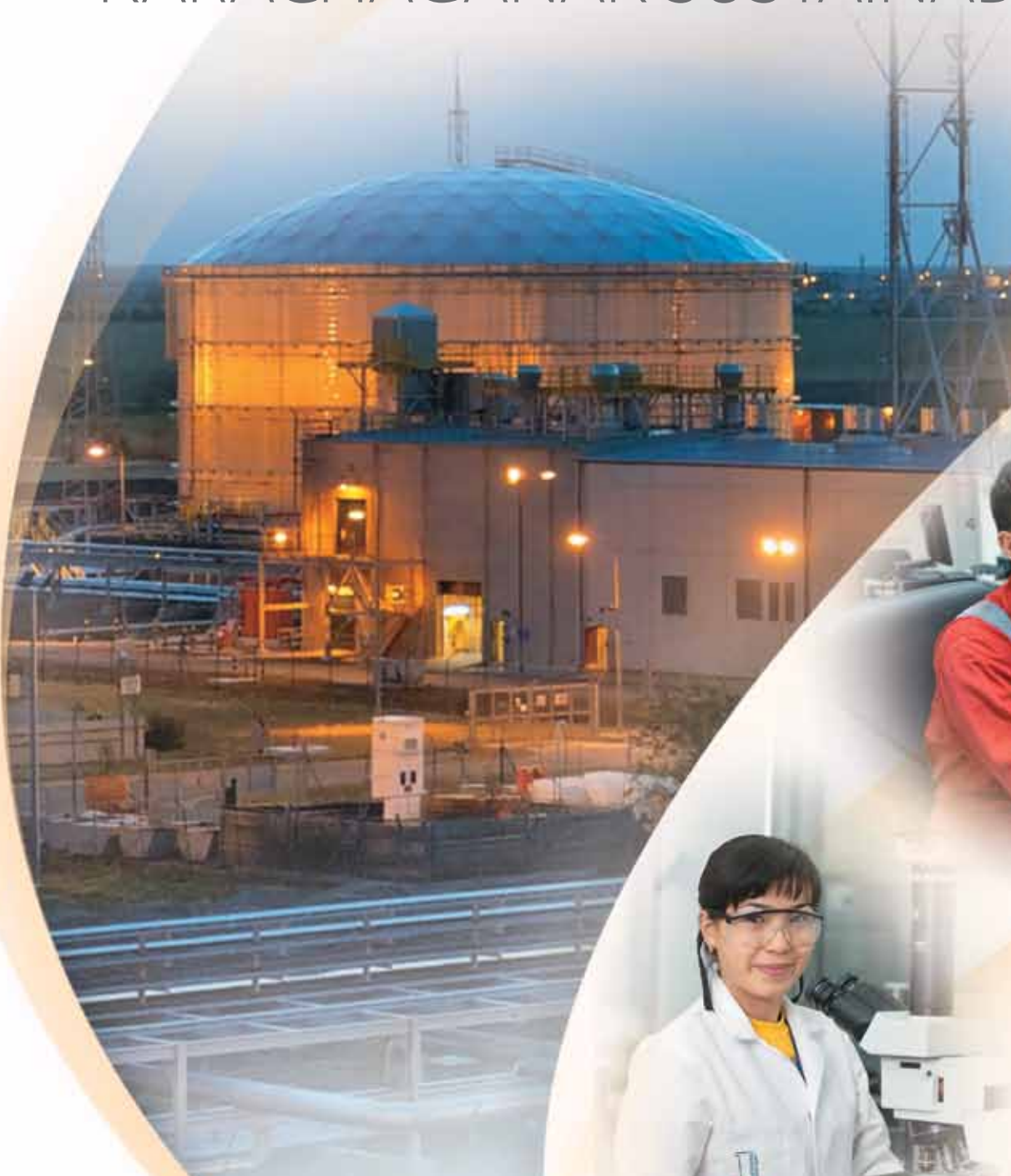


KARACHAGANAK SUSTAINABILITY REPORT 2012

THE ENDURING BENEFITS OF KARACHAGANAK



BG GROUP



eni



LUKOIL



КазМұнайГаз

Partners in the Karachaganak Venture



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OUR COMMITMENT TO SUSTAINABLE DEVELOPMENT



This is the fifth sustainability report issued by Karachaganak Petroleum Operating B.V. (KPO) with the aim to demonstrate our continuous commitment to sustainable development. KPO was the first company in Kazakhstan to issue an independently assured sustainability report in accordance with international standards in 2009.

In following the principles of sustainable development we take as a reference its widely acknowledged definition of the Brundtland Commission's 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.

REPORT PROFILE



The present report covers our results in 2012 and plans for the coming year. The report also contains information from the years 2011 and 2010 to ensure the comparative evaluation of our performance over the previous years. The report is issued annually.

REPORT SCOPE AND BOUNDARIES

The report presents information on our main activities defined in the section 'Overview of Karachaganak Operations' and our environmental, social and economic performance. The report covers sustainability aspects of the KPO operations in Kazakhstan.

STAKEHOLDERS

As part of our normal business practice, we engage and consult with a wide range of stakeholders. Good relationships with these stakeholder groups are essential to our long-term success, and input from our dialogue with them has helped in shaping the content of this report.

The group of stakeholders we engage with includes our parent companies, the government, local community, counterparties, employees, business partners, media and civil society. Detailed Stakeholders Engagement matrix and ways of engagement are presented in the Corporate Governance chapter on pages 26-28.

INDEPENDENT ASSURANCE

The accuracy of the provided data has been independently verified by Ernst & Young. The independent assurance report is included on pages 76-77. This procedure is implemented to ensure transparency and validity of the information given in the report.

GLOBAL REPORTING INITIATIVE

This report has been produced in line with the Global Reporting Initiative's (GRI) G3 Guidelines, the de facto global model for sustainability reporting. KPO adheres to sustainability reporting principles included in the GRI Guidelines. The

report complies with the requirements of Application level B+ of the GRI Guidelines version G3.0. The Standard Disclosures table is a part of this report; it is also available on our website at www.kpo.kz.

LETTER FROM GENERAL DIRECTOR



Dear readers of the Report,

I am pleased to present to you the fifth Karachaganak Sustainability Report, covering the year 2012.

The passing year has become a turning period for the Karachaganak Project with regards to the management and its development path. KPO senior management has been gradually changed throughout the year. The key events of the Project were the entrance of KazMunaiGas into the Karachaganak Venture as a partner and the 15th anniversary of signing the Final Production Sharing Agreement. Great progress has been achieved since 1997, and today we have world-class operations producing at high-level records and bringing the benefits to the Republic of Kazakhstan and the Karachaganak Partners.

In 2012 the Karachaganak production has reached 139.5 million barrels of oil equivalent. Compared to the previous periods, this is a record level of our production. Liquid production for 2012 was in excess of 11 million stabilised tonnes, and gas production surpassed 17.5 billion scm – both significant annual production records for Karachaganak. Our gas reinjection has exceeded 8.6 billion scm for the year – again an annual record.

In operations, the third condensate storage tank at the KPC has been commissioned at the beginning of 2012. The total shutdown strategy scenarios have been reviewed to reduce costs and increase benefits. In 2012, we have successfully drilled four new wells and completed some of the best liquid producing wells ever undertaken, including the prolific 9832. We have hooked up 11 wells during the year – the highest absolute number of wells per consecutive 12 months in our history.

The second drilling rig is currently under mobilisation. Capital works to upgrade asset

integrity have been continued throughout the year. In July 2012, the new General Purpose Incinerator has been launched into service at the Eco Centre.

The annual record production followed by the record sales volumes let us celebrate our 2012 commercial success. The highlight in marketing operations was the 300th million tonne of CPC Blend crude oil lifted by KPO's tanker last October, since loading operations started in 2001 in the port of Novorossiysk.

Production excellence can be achieved in safe operations. It is our highest priority to ensure that we deliver these results safely, and we are encouraged to see a downward trend in our total recordable and high potential incident frequencies. We also have a lower number of lost time injuries compared to 2011, however, zero incidents remain our firm target, and we continuously urge employees to adhere to safety rules in keeping safe.

This year the capital projects foreseen by the 2011-2013 Environmental Protective Measures Plan have continued. In May KPO won the BG Chairman's HSE Award in the category 'Climate Change – GHG Reduction Programme' sustaining our established world-class record on environmental management. The other recognition at the Parent Company level was the BG Group's Golden Hard Hat Award won by Bektasov Kubaidulla for demonstrating extraordinary safety commitment. The KPO gas utilisation rate has reached 99.87 per cent, maintaining specific GHG emissions at 66 tonnes of CO₂e per kiloton of hydrocarbons level produced in 2012.

The Project Development team in Astana continued growing during 2012. The Assess phase for Karachaganak Future Growth was completed in July 2012. The Concept Selection phase is underway, and screening of a number of development cases took place in December.

The KPC Gas Debottlenecking Project has also progressed in its Concept Selection phase, and in accordance with the approved Field Development Plan, the feasibility and concept selection studies for Plateau Extension Projects are continuing. The annual Employee Opinion survey held last year supported in identifying employees' perception on a number of aspects including motivation. This has helped KPO Leadership team to be able to build on the positives and focus the efforts on other important areas going forward. The new Collective Agreements signed with the two Trade Unions in August 2012 included the extended fringe benefit package.

We are proud of our record breaking performances that were delivered by the efforts and focus of our people. During 2012, 10 senior positions at KPO were nationalised. In percentage by year end, 69 per cent of managerial positions, 95 per cent of professional and supervisory roles and all of the venture's skilled and clerical positions have been filled by national staff.

The Kazakh content in KPO contracts for the provision of goods, works and services has made 56 per cent equal to USD 335 million.

During the year, a number of social-infrastructure projects have been completed by KPO, including four schools constructed in the WKO, a school fully repaired and the process water supply system reconstructed in the Uspenovka village, a school workshop repaired in the Zharsuat village, Sovetskaya street repaired in Aksai, the Central Boiler-house fully refurbished in Aksai. In December KPO finished the construction of the Celebration Palace in Uralsk, the Family Outpatient Clinic in the Bisen Village of the Bokeiorda District and the Cultural Centre in the Sary Omyr Village in the Terektinskiy District.

Our projects and consultation with local communities through the established Village

Councils in the four rural districts of the Burlin District have continued successfully. KPO implemented two of its long-term community projects, such as the provision of health improvement programme for elderly community members and Summer Camps for local schoolchildren.

KPO's efforts in promotion of sustainable development have been recognised by the "Expert RA Kazakhstan" at the First Practical Conference "Annual Reports: Experience of Leaders and New Standards" held in Almaty in December 2012. At this conference our Sustainability Report for 2011 has been rewarded as commendable in the nomination 'Best Report on Sustainable Development'.

We are proud that over the past year we had managed to achieve considerable progress in many areas of our activity on the way to a more sustainable environment for the benefit of all our partners and stakeholders. Safety, protection of environment and sustainability will continue to be our focus in the coming years.

Damiano Ratti
KPO General Director

OUR PERFORMANCE AND TARGETS

Our targets in 2012	Target achievement (yes, no, status)	Actions taken in 2012	Targets for 2013
HEALTH AND SAFETY			
Surveillance audits on ISO 14001 and OHSAS 18001 standards to be conducted by a certification body	✓	All the non-conformances were closed by the end of July 2012. Integrated Surveillance Audit on ISO 14001 and OHSAS 18001 held in October 2012 confirmed KPO's compliance.	Conduct a surveillance audit to ensure compliance of KPO's HSE MS with ISO 14001 and OHSAS 18001 standards requirements
Develop and implement HSE cards e-learning	✓	HSE Card Programme e-learning materials were developed, tested and launched.	
Expand Major Hazard Awareness Training programme to Managers	✓	Major Hazards Awareness Workshop was held in Spadeadam (UK) for KPO Senior Management Personnel.	Hold training for all level 2 critical safety positions
<ul style="list-style-type: none"> Expand safety leadership skill base to those already trained and extend the programme to include health and environment; Following the HSE Culture Survey outcomes, to align training materials and roll out further HSE intervention techniques programme. 	~	Effective HSE Leadership Tour training was developed and delivered to 85 per cent of mandatory personnel trained (133 out of 157 Level 1, 2 and 3 Managers) plus 108 extra non-mandatory personnel was also trained. Supporting materials were developed including LifeSaver HSE Leadership Tour Checklists.	Train the remaining 15 per cent of L1, 2 and 3 managers and any additional attendees nominated by their managers
<ul style="list-style-type: none"> Finalise documentation related to Contractor Management processes; Improve KPO Contractor Management processes; complete outstanding HSE related actions of the CMWG Action Plan; Roll out training on new/revised processes; Develop an overarching KPO standard to monitor the HSE performance of contractors; Conduct workshops for Contract Owners and integrated Contractor/KPO fora. 	~	<ul style="list-style-type: none"> Partially implemented; 2 documents left to complete which are due for completion in Q1 2013. Partially implemented; with the exception of the two documents referenced and the one referenced below, all other actions have been completed; Partially implemented; first phase roll-out training has been provided to approximately 102 key personnel involved in contractor management processes across the company. Due for completion by end Q2 2013; Partially implemented; final draft currently undergoing peer review and comment. Due for completion end Q1 2012; Completed. Approximately 147 Contract Owners have undergone the training and both scheduled contractor fora were held. 	Complete the outstanding deliverables in the Contractor Management Working Group action plan and the Contractor Monitoring Strategy and provide supporting training to user groups




Our targets in 2012	Target achievement (yes, no, status)	Actions taken in 2012	Targets for 2013
HEALTH AND SAFETY			
Complete application of the new HSE audit and inspection procedure at the end of Q1 2012	✓	The HSE Audits and Inspections Procedure is implemented and functioning. The audits are performed according to the schedules. Performing of 101 audits by the end of the year	
Develop a KPO wide Life Saver roll-out campaign for all Life Saver topics including supporting materials – presentations, posters, tool box talks and leadership tours cards and e-learning	~	Seven out of eight of the rejuvenated LifeSaver topics have been issued.	Complete the roll-out of Safe System of Work Life Saver
			Review the Incident Management and Crisis Management procedures; implement corrective actions following the integrated exercises held
			Continue HSE Competence Assessment of Line supervisors programme
ENVIRONMENT			
Achieve total project reduction of GHG emissions by 30.97 kt CO ₂ e	✓	GHG emissions reduced by 51 kt CO ₂ e	Achieve total project reduction of GHG emissions by 70 kt CO ₂ e
Complete the Fieldwide Wastewater Upgrade Project	~	The Project is ongoing in a number of operational facilities including KPC, Unit 3, Bolshoi Chagan Pumping station and KCC.	Complete the Fieldwide Wastewater Upgrade Project
Conduct a study of further sewage treatment efficiency improvement	✓	The 2-year study of effectiveness of biological treatment (post-treatment) of the KOGCF wastewater using eichornia (water hyacinth) was started in 2012.	Complete the study of further sewage treatment efficiency improvement
Install two new automatic Environmental Monitoring Stations at the Sanitary Protective Zone (SPZ) boundary	✓	Two new EMSs #15 & 18 were installed at the SPZ boundary.	Install two new automatic Environmental Monitoring Stations #16 & 17 at the Sanitary Protective Zone (SPZ) boundary

LEGEND: ✓ implemented; ~ work in progress; ✗ not completed.

OUR PERFORMANCE AND TARGETS

Our targets in 2012	Target achievement (yes, no, status)	Actions taken in 2012	Targets for 2013
ENVIRONMENT			
Start implementation of the Biodiversity Action Plan	✓	<p>According to the KOGCF Biodiversity Conservation Action Implementation Plan 2012-2013 approved in April 2012 by the WKO Branch of ZhCED, the following actions were implemented in 2012:</p> <ul style="list-style-type: none"> • Field studies on accounting of beaver species were carried out across KOGCF area; • Method statements were developed for water protection zones and belts at the KOGCF area; • Species database of KOGCF was created; • Analysis of the state of ecosystems within KOGCF and adjacent area to create an ecosystems map for 3 different periods was started. 	<p>Implement BAP as planned for 2013 including:</p> <ul style="list-style-type: none"> • Vegetation monitoring within the area of KOGCF influence; • Satellite images review to identify changes in the ecosystems, • Mapping of adjacent ecosystems; • BAP improvement recommendations.
Commission the General Purpose Incinerator (GPI)	✓	GPI was completed and put into operations in July 2012.	-
Remodel the Warehouse #3 for the Waste Segregation Unit and complete construction	~	Project for modification of Warehouse #3 into Waste Segregation facility is fully developed and received positive Sanitary and Epidemiological Expert evaluation and is under Environmental expert review.	Complete remodelling the facility for Waste Segregation Unit and introduce it into service
Commission five additional waste burial cells at the Eco Centre's Landfill	✓	7 cells have been put in operation since 2011. Five additional waste burial cells completed in 2012.	Commission five additional waste burial cells at the Eco Centre's Landfill
<ul style="list-style-type: none"> • Study waste accumulated in cell 1 for further recycling and disposal in the Landfill; • Study all legacy waste in cells 2, 3 & 4 at old polygon and develop a plan for treatment if necessary and permanent disposal at the Eco Centre Landfill 	✓	<ul style="list-style-type: none"> • Wastes accumulated in cells of the Solid Waste and Spent Drilling Liquid Storage Polygon site were studied. Final report with recommendations was submitted to KPO management for approval. • Project was completed in full volume at the end of 2012 as per the schedule. 	-
• Study on re-use methods of wastes after Thermo-mechanical cuttings cleaning facility and Rotary kiln incinerator	✓	• The West Kazakhstan State University completed the work "Development of methodology for the use and processing of carbonate oil-based mud cuttings" in August 2012. The work sets the potential usage of carbonate oil-based drilling mud after its mechanical treatment as mineral powder in asphalt production for road construction.	Implement stage II of the Study on re-use methods of wastes after Thermo-mechanical cuttings cleaning facility and Rotary kiln incinerator to examine options for clay cuttings

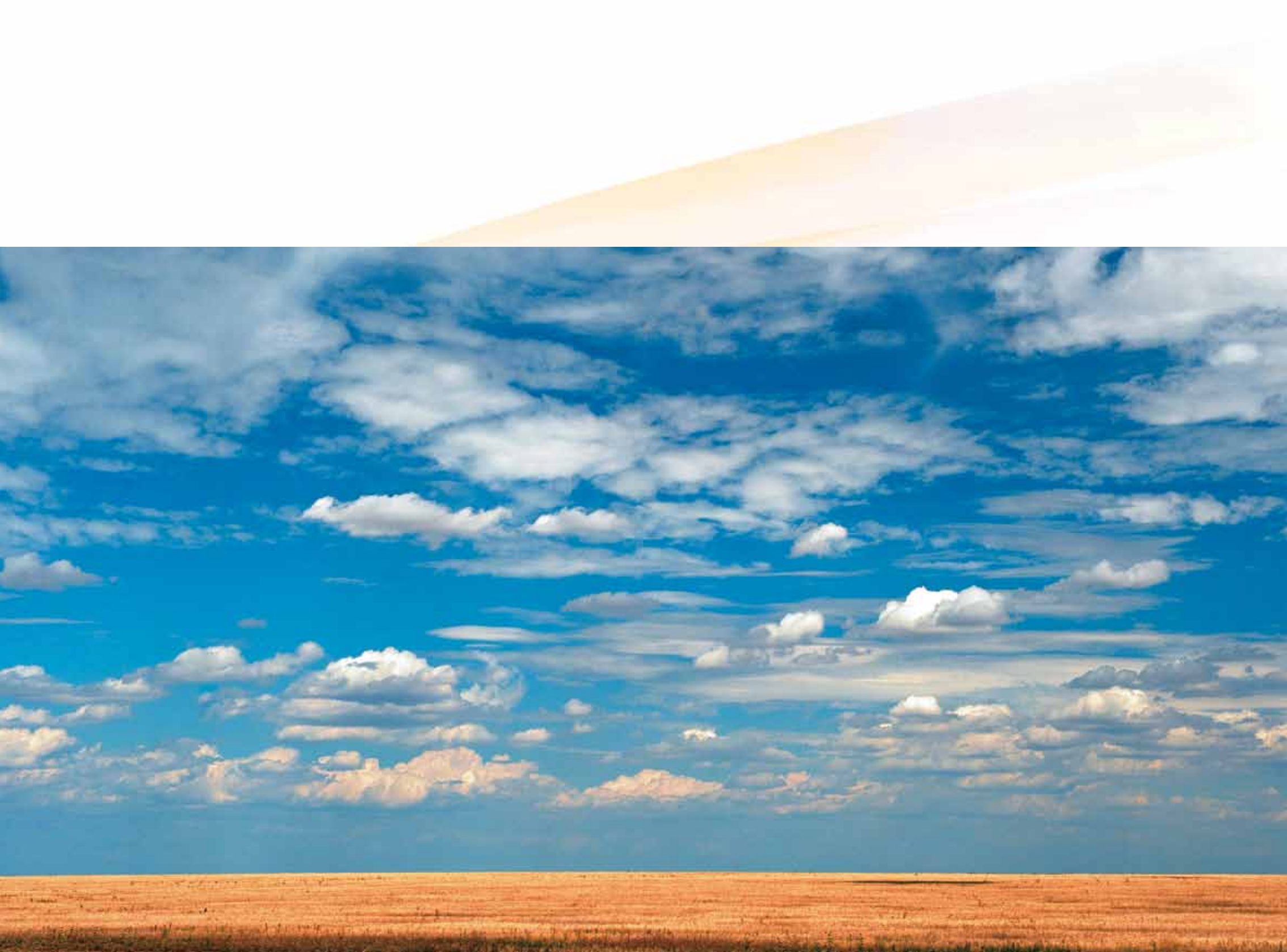
Our targets in 2012	Target achievement (yes, no, status)	Actions taken in 2012	Targets for 2013
OUR PEOPLE			
Implement the Nationalisation Plan by achieving: <ul style="list-style-type: none"> 70 per cent in Category 1; 95 per cent - in Category 2 	~	Targets have been partially met: <ul style="list-style-type: none"> Category 1 – made 69 per cent, Category 2 – made 95 per cent. 	Follow-up implementation of the Nationalisation Plan to achieve 70 per cent in Category 1
Implement the coaching programme	~	The implementation was postponed till 2013 due to ongoing assessments and formalising the plans for identified high-potential employees. The coaching sessions were scheduled.	Start the coaching process for identified group of high-potential employees
Agree with the Authority and develop necessary policies and procedures for the National staff retention programme; Implement retention tools	~	<p>The retention related tools are not part of a particular retention programme, however a set of actions was undertaken in 2012 to address the issue and improve the Company's retention capacity:</p> <ul style="list-style-type: none"> Salary review <ul style="list-style-type: none"> Market based salary increase for on-site technical and engineering personnel from November 2012. In total, over 1,600 employees received increases, mostly in Production and Maintenance; Market based salary increase of specialists and management in Contracts and Procurement Controllership with high personnel turnover in previous years; The Company started giving housing allowances to personnel from non-WKO regions working in shifts; Improved benefits for employees under the Collective Agreements. 	<ul style="list-style-type: none"> Continue improving the benefits package for personnel; Continue adjusting the salaries of key KPO personnel to the market level
<ul style="list-style-type: none"> Complete Competency Models development for Finance Directorate Launch a software application for CMS 	~	<ul style="list-style-type: none"> Competency Model development for Finance Directorate has been finalised; Development of software application for CMS started, launch of a software application postponed to 2013. 	<ul style="list-style-type: none"> Complete development of CMS software
Apply for OPITO site audit to obtain accreditation for technical CMS targeting core operational staff	~	In the light of the overall CMS strategy change in 2011, the process for OPITO accreditation has been expanded both in scope and timeline. Documentation required for conducting OPITO site audit was revised considering comments received from desk top audit. New OPITO criteria being developed entailed postponement of the site audit to Q2 2013. Documentation package is under revision to comply with new requirements.	Execute OPITO site audit, close out actions to achieve CMS Certificate of Assurance

LEGEND:  implemented;  work in progress;  not completed.

OUR PERFORMANCE AND TARGETS

Our targets in 2012	Target achievement (yes, no, status)	Actions taken in 2012	Targets for 2013
OUR PEOPLE			
Continue performing technical assessments for front line personnel of Production & Maintenance department and HSE Life Savers awareness assessment	~	The implementation process was split in phases scheduled for 2 year period. Assessments have continued throughout 2012: technical assessment performed – 3,732, Life savers assessment performed – 6,843.	<ul style="list-style-type: none"> • Complete 75 per cent of technical assessments. • Include other personnel/positions within Operations Directorate by end of 2013 • Put in place a sustainable system with continuous improvement processes, resources, database and documentation. External audits to ensure all requirements are applied with sustainable approach.
ECONOMIC DEVELOPMENT			
Support the Aksai Industrial Park Project in line with the schedule in Q2 2012	✓	Aksai Industrial Park was opened in mid-2012.	-
Achieve 40% Local Content out of total expenditure for purchasing of goods and services of the Kazakhstani origin	✓	56% of Local Content achieved	Ensure Local Content is a part of contracts' preparation process by applying a vendor list review, pre-qualification assessment, technical evaluation plan.
Maintain compliance with RoK legislation on Local Content	~	The Local Content schedule, technical evaluation plan and pre-qualification questions are formally included in the KPO standard contract template.	Continue monitoring of Local Content compliance
COMMUNITY			
Issue the 2012 Social Performance Plan	✓	The Plan was issued in June 2012.	Issue the 2013 Social Performance Plan
Seek confirmation on availability of funding for resuming of the long-term community development projects in 2012	✓	Funding for community development projects was approved. The long-term community development projects (Summer camps for 160 schoolchildren and health improvement for 160 elderly community members) were implemented. Funds were allocated to procure equipment and materials for schools in the Burlin District.	Conduct the quarterly Village Council meetings and implement the community development projects included into the 2013 Social Performance Plan
Continue monitoring of the effectiveness of the Grievance procedure	~	Monitoring is ongoing. KPO Community Grievance and Suggestion Management Procedure was revised in July 2012.	Monitor the Grievance and Suggestions Procedure

LEGEND: ✓ implemented; ~ work in progress; ✗ not completed.



OVERVIEW OF KARACHAGANAK OPERATIONS

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, it is estimated to contain 9 billion barrels of condensate and 48 trillion cubic feet (tcf) of gas, of which approximately 10 per cent has been recovered to date.

The Karachaganak field is located in a remote and challenging working environment, where the ambient temperature ranges 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 metres, is some 1,600 metres thick and very complex. The hydrocarbons contain up to 4.5 per cent of highly toxic hydrogen sulphide, as well as carbon dioxide which can, in certain conditions, be highly corrosive. Since 1997, the Karachaganak field has been developed and operated by Agip and BG, with principal operating functions being delegated to KPO, an operating entity owned by the four international oil companies that entered into the Final Production Sharing Agreement (FPSA) with the Republic of Kazakhstan in 1997: BG and Agip (joint operators with 32.5 per cent holding each), Chevron (20 per cent holding (formerly Texaco) and LUKOIL (15 per cent holding) (together referred to as the "Contractor").

Starting from July 1, 2012, the national company KazMunaiGas (represented by FPSA IMC) entered the Karachaganak partnership, which has changed the partnership stakes to BG Group (29.25 per cent), eni SpA (formerly Agip) (29.25 per cent), Chevron Corporation (18 per cent), LUKOIL (13.5 per cent), and KazMunaiGas (10 per cent). The FPSA places responsibility for the field development with the Contractor until 2038. The above mentioned five companies, making up the Contractor, pool their combined international experience to share it with the Republic, so that the maximum value can be realized from the Karachaganak Field.

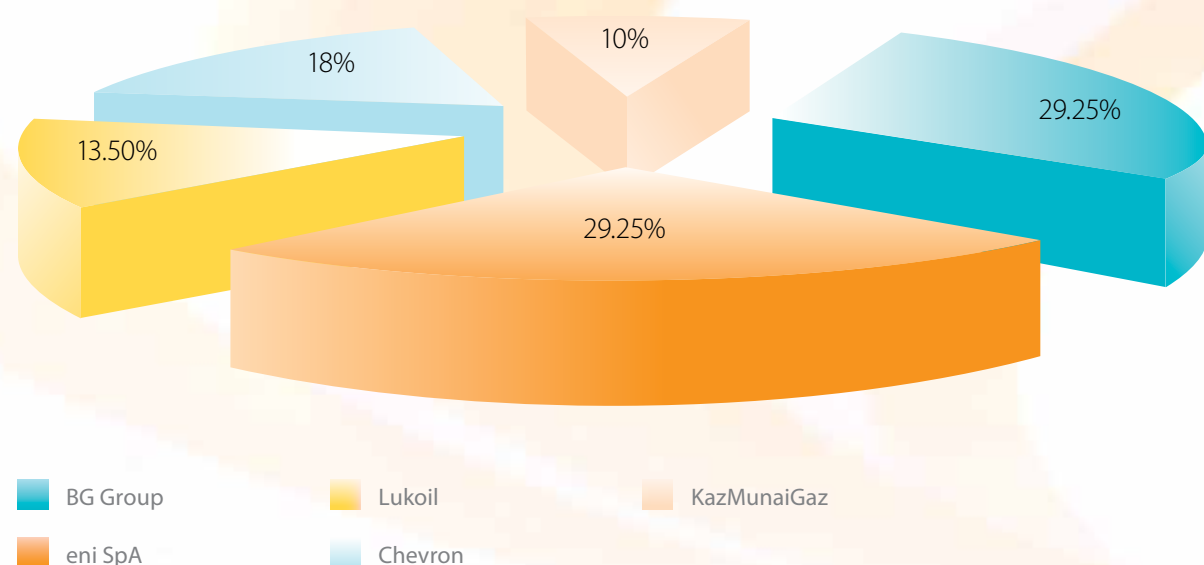
Some 4,000 people work in KPO today in a talented and multicultural team. Since the signing of the FPSA, the Contractor has invested more

than USD 18 billion to develop the field, applying industry leading-edge technology aimed at maximizing sustainable economic value and mitigating environmental impact. To maximize sales revenues, most of the hydrocarbons produced are exported. Following commissioning of the fourth liquid stabilisation train at the KPC approximately 93 per cent of liquid production in 2012 was exported as crude oil to Western markets via the Caspian Pipeline Consortium (CPC) and Atyrau – Samara pipeline (via the Transneft system). The CPC pipeline deliveries are to the Black Sea port of Novorossiysk and the Atyrau – Samara pipeline deliveries are to the Baltic Sea port of Primorsk and the Black Sea port of Novorossiysk as well as deliveries to Poland. 10 per cent of the production delivered via CPC is now lifted by an FPSA IMC affiliated entity for the benefit of the Republic. The remaining liquids were exported in 2012 as unstabilised condensate to Russia via Orenburg or delivered to the local market.



In the KPC Control room

Partners in the Karachaganak project

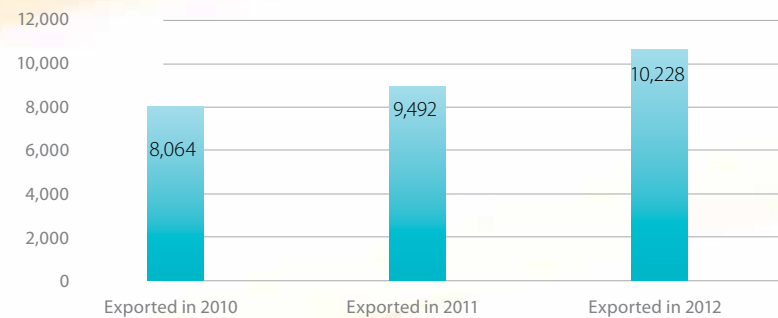


OVERVIEW OF KARACHAGANAK OPERATIONS

The gas produced from the field is re-injected into the reservoir to help maintain reservoir pressure, sold as raw gas under long term contract to KazRosGas and a small percentage (4.5 per cent) is sweetened (i.e. hydrogen sulphide is removed) to either generate electricity for the KPO facilities or sold to the local market.

For a description of the field layout, please see pages 17-18.

Oil exported via CPC and Atyrau – Samara



Map of Kazakhstan and KPO export routes



Only 0.13 per cent of the produced gas had been flared in 2012 in normal production and drilling operations. More details on gas utilization at Karachaganak can be found in the chapter 'Caring about the Environment' on page 42.

OVERVIEW OF KARACHAGANAK OPERATIONS

The principal development activities that KPO undertook during 2012 were:

- Successfully drill 4 new wells and hook-up 11 wells and continue the programme of well workovers to optimise production and injection well stock in the field;
- Successfully complete and put in operation Third Condensate Storage Tank at KPC processing plant;
- Continue the capital works planned to upgrade asset integrity;
- Continue the study and implementation of a series of short and medium-term actions to enhance safety at Unit 3;
- Continue the capital projects part of 2011-2013 Environmental Protective Measures Plan (EPMP);
- Carry on feasibility and concept selection studies for Plateau Extension Projects in accordance with 2011 FDP approved by the Authorities;

Examine a series of short-term development opportunities that will act as stop-gaps between the current stage of the Field development and the eventual long-term development and whose primary purpose would be to preserve the current production rate from the Field.

Key 2012 achievements:

- Historically maximum level of production of 139.5 million barrels of oil equivalent and consequently maximum level of sales was reached;
- Commissioning of 3rd KPC storage tank will help meet commercial obligations to KPO counterparties and prevent suspension of production under critical circumstances;
- KPO sales customs clearance has been fully relocated to the Uralsk Customs.

Achievements obtained by deploying advanced technology include:

- Developing an innovative high-pressure, high-volume sour gas re-injection system;

- Drilling the deepest multilateral wells in Kazakhstan to date;
- Reducing greenhouse gas (GHG) emissions from well testing and operations through the pioneering use of a well testing equipment and Dry Low NO_x (DLN) tuning of gas turbines;
- Reducing the waste generation through the commissioning the New General Purpose Incinerator in the Eco Centre.

2012 Operations and opportunities for future growth

In 2012, KPO produced 139.5 million barrels of oil equivalent in the form of stable and unstable liquids, sour gas, and sweet gas for use as fuel and excluding gas injected in the reservoir. Scope of activities scheduled for a total mandatory shutdown in 2012 was reduced due to a number of technical and contractual reasons with a major scope deferred to spring 2013. Shutdown strategy scenarios were reviewed to reduce costs and increase benefits.

In addition, 8,666 million cubic meters of sour dry gas was injected into the reservoir, a volume equivalent to approximately 49.5 per cent of the total gas extracted.

Sales volumes via CPC and Atyrau-Samara pipelines in 2012 have increased by 8 per cent in comparison to 2011 (10,228 kt vs. 9,492 kt subsequently).

Product specification compliance

As per the terms and conditions of purchase and sales contracts for raw gas and unstable gas condensate, the supplied products should meet the requirements specified in those agreements.

At all stages of production, processing and transportation of hydrocarbons, the KPO Chemical Laboratory deals with sampling, analysis and product tests to ensure compliance with transnational and national standards registered in the RoK, including the specifications agreed with the buyers in purchase and sales contracts.

Technical specifications for supply of export oil ensuring safety and health of people and environment are established by the RoK Standard #1347-2005.

Quality of gas produced at the KPC is defined in accordance with the Transnational Standard #5542-87. Gas quality compliance is defined by the West Kazakhstan Branch of "NatEx" JSC and Quality Certificate is granted on the basis of regular tests.

In 2012, KPO had zero cases of non-compliance with regulations concerning the quality of its products and no complaints registered with regards to breaches of customer privacy and losses of customer data.

2012 Production	2012 2011 2010			
	Mboe	139.5	138.5	133.7
Unstable Liquids Condensate to Orenburg Gas Plant and Mini Refinery	kt	850	1,498	2,346
Stable Liquids Oil and stabilised condensate to CPC and Atyrau – Samara	kt	10,246	9,542	8,064
Raw Gas To Orenburg Gas Plant	Mscm	8,039	7,974	7,901
Sweet Gas Production At the KPC for the plant and sales to the WKO community	Mscm	790	751	650
Gas Injection Not included in total production, as this is not sold	Mscm	8,666	8,129	6,437

OVERVIEW OF KARACHAGANAK OPERATIONS

KARACHAGANAK OPERATING FACILITIES

An interconnected system

88 producing wells and 16 sour gas re-injection wells are currently online at Karachaganak, with a total well stock of 377 wells. 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.

KPC

The Karachaganak Processing Complex processes oil condensate from 44 production wells and 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 included an additional condensate stabilisation and sweetening train, the expansion

of the existing Karachaganak Processing Complex (KPC) inlet facilities and some 13 new wells, an additional Sour Gas Export Compressor, additional set of Condensate Booster Pumps and Export Pumps, and two infield pipelines with associated tie-ins to Unit 3 and EOPS.

The gas phase splits into two streams. One feeds the sweetening plant, providing fuel gas supply for the field's power station and sweet gas supply for the local market. The second stream is directed to Unit 2 for re-injection and/or to Unit 3 for export to Orenburg.

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 a processing facility at the Orenburg Processing Plant in Russia. Unstabilised condensate is also supplied to a neighbouring privately-owned facility for treatment.

As the eldest facility in Karachaganak, Unit 3 has undergone a risk assessment in 2012 under the Unit 3 Risk Reduction Programme. Identified

risks reduction opportunities have been put in place during 2012 including personnel relocation and planning of necessary upgrades of the emergency response system.

UNIT 2

Unit 2 is a unique multi-functional facility with a leading-edge technology introduced in 2003. It is able to separate, process and re-inject high pressure sour gas and to produce oil, then send it for stabilization at KPC prior to export. 21 incoming production wells feed Unit 2.

One of the highest pressure sour gas injection systems in the world is in place at Unit 2. Three compressors are capable of injecting gas at a pressure up to 550 bar with a high H₂S content (up to 9 per cent).

This gas injection scheme has been proving to be successful as it provides partial pressure maintenance, improves liquid recovery and also eliminates the need to extract sulphur, which delivers important environmental benefits.

ECO CENTRE

The Eco Centre is a world-class waste treatment facility combining six 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-based 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 workover 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 a total of 12 waste burial cells commissioned;
- New general purpose incinerator launched into service in 2012.



View of the Karachaganak Processing Complex

OVERVIEW OF KARACHAGANAK OPERATIONS

KARACHAGANAK ATYRAU TRANSPORTATION SYSTEM (KATS)

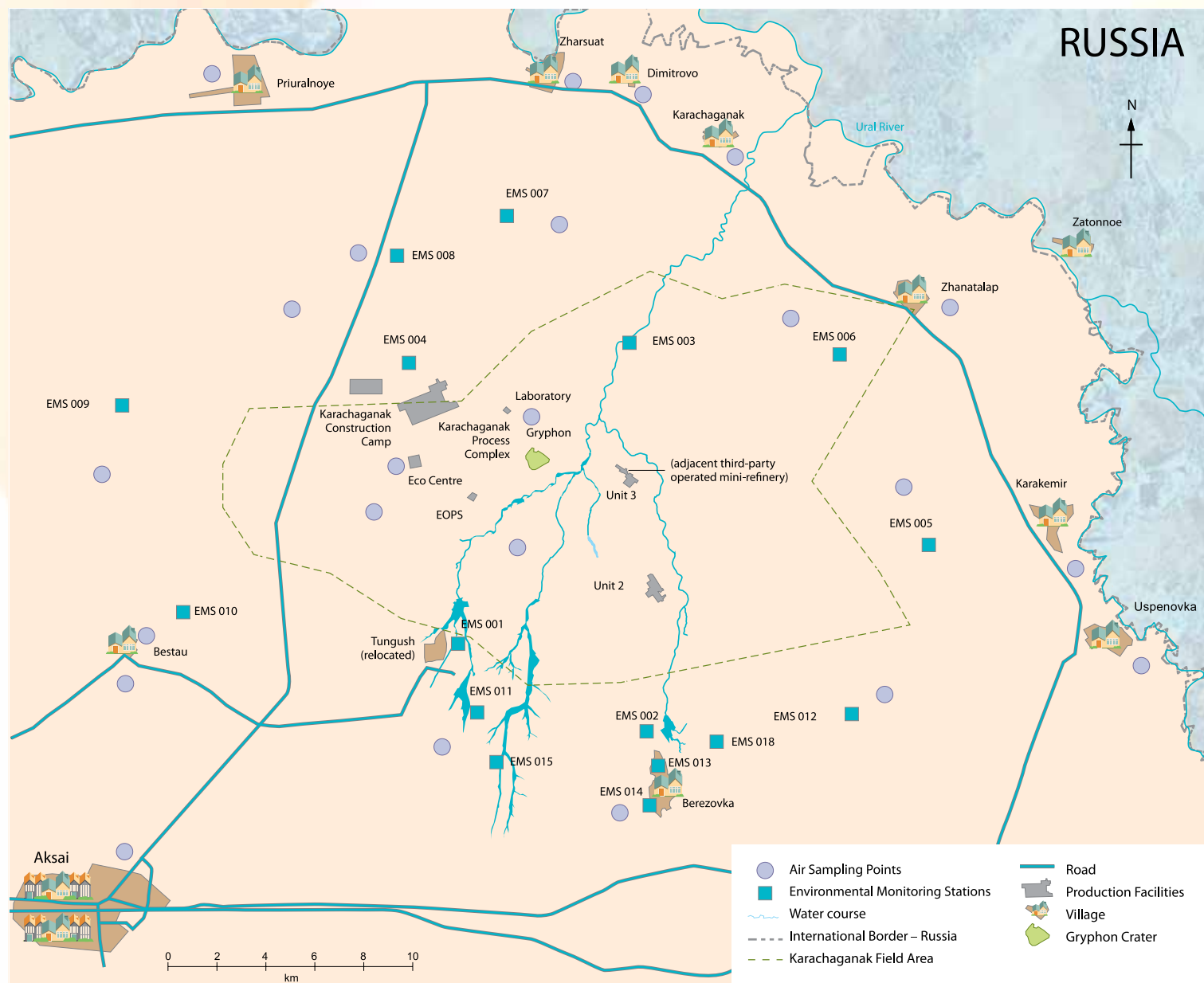
KATS is the main export route for stabilised liquid hydrocarbons produced at the Karachaganak Field that has been in operation since 2003. The transportation system consists of a 24 inch buried pipeline from the Karachaganak Processing Complex (KPC) to Atyrau on the Caspian Sea. There are two pumping stations: one at Bolshoi Chagan and one at the KPC; and a receiving

and storage facility in Atyrau. KPO operates and maintains all of these facilities. In Atyrau, the line connects to the Caspian Pipeline Consortium (CPC) system which transports oil to Novorossiysk where it is loaded on tankers and exported.

THE KARACHAGANAK ORENBURG TRANSPORTATION SYSTEM (KOTS)

KOTS consists of five pipelines of 140 kilometres in length that transport hydrocarbons from the Karachaganak field to the Orenburg Gas Plant

(OGP) in the Russian Federation. These pipelines were in existence prior to the second phase of Karachaganak's development. Two pipelines of 28 inches in diameter transport sour gas to the OGP for further treatment. In addition there are three 14 inch lines of which one is a liquid export line and two are dual service and transport either unstabilised liquid or sour gas.



CORPORATE GOVERNANCE

Good governance is essential for ensuring the sustainability of large-scale investments. In the more complex environment of a joint venture such as KPO, our strong governance, controls and assurance processes are vital to our ongoing success.

ORGANISATION AND GOVERNANCE STRUCTURE

Our organisational structure has been designed to help us meet our business objectives and fulfil our obligations to the Kazakhstan authorities as set out in the FPSA, the Venture's governing document.

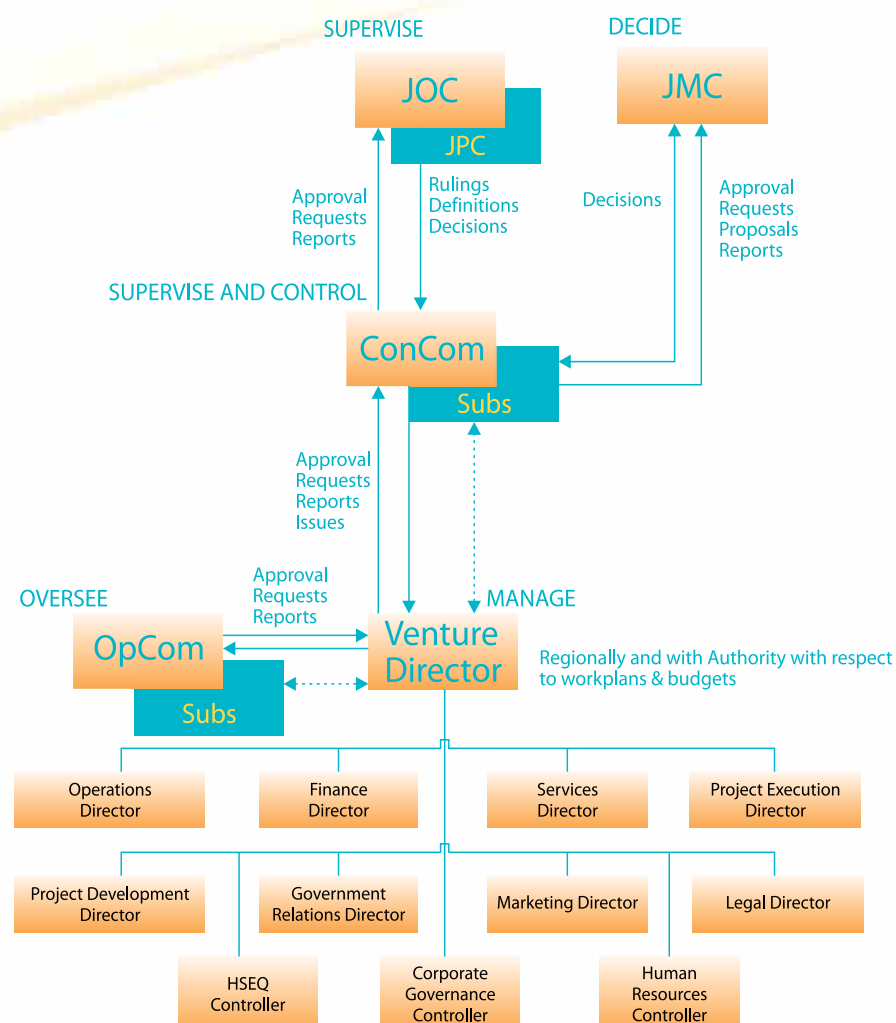
The FPSA establishes two committees: the Joint Operating Committee (JOC) and the Joint Marketing Committee (JMC). Both committees are formed from representatives of each of the five Contracting companies, including BG, eni (formerly Agip), Chevron, Lukoil, KazMunaiGas (represented by FPSA IMC) (referred to as the Contractors), which are the shareholders of KPO, and an equal number of members designated by the FPSA Authority (PSA LLC), which represents the Republic of Kazakhstan. The Contractor and the Authority have equal voting rights. All decisions require a unanimous vote.

JOC

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 Programme and Budget, Social and Infrastructure Projects, any changes to the Field Development Plan. JOC meetings take place at least twice a year.

The JOC is chaired by the Chairman who is appointed by the Republic of Kazakhstan 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.

Karachaganak Venture Senior Management Structure



CORPORATE GOVERNANCE

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 formed by the JOC, which is responsible for the approval of all major contracts to be awarded by KPO and acts in accordance with the JOC Tender Procedure as approved by the Authority and the Contracting Companies. Membership and voting rights for the JPC are the same as for the JOC, and its decisions also need to be unanimous.

JMC

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 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 in accordance with the rights and obligations of the Contractor under the FPSA.

Membership of the ConCom is made up of representatives of each of the five Contracting Companies with the KPO management also 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 ninety per cent. The sub-committees are responsible to the ConCom to assist the ConCom and KPO, as needed in implementing its business programmes.

The ConCom currently has the following sub-committees:

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

The lower level of the management body is the Operating Committee comprising representatives of the operating parent companies: BG and eni.

A number of sub-committees responsible for specific tasks in the areas such as HR, HSE, security and sustainability are assigned to support both the ConCom and Operating Committees.

The General Director, the Deputy General 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.



CORPORATE GOVERNANCE

KPO DIRECTORS AND CONTROLLERS



Damiano Ratti
General Director

Damiano joined BG Group in 2006 taking up the position of Chief Operating Officer BG Italy and consequently being appointed Chief Executive Officer and Chairman of BG Italy. During his career he gained valuable experience in managing business activities ranging from exploration, power, gas marketing and LNG. Before joining BG Group, Damiano held various senior roles in Shell. One of the previous posts he took was General Manager for the Natural Gas department where he was responsible for strategy formulation and business development in Italy, France and Central and Eastern Europe countries. Joined KPO in 2012 as General Director.



Luca Vignati
Operations Director &
Deputy General Director

Luca has solid technical and managerial background combined with considerable professional experience gained in various overseas assignments such as in Norway, Tunisia, the UK and Turkmenistan. Prior coming to KPO, he held the position of Managing Director of Agiba-Egypt, the joint venture between eni and the Egyptian state owned Oil Company operating both onshore and offshore fields. Joined KPO in 2012 as Operations Director.



Andrea Sacchi
Finance Director

Andrea worked in Agip from 1992 to 1998 and re-joined eni in 2007. Prior to joining KPO he worked as Planning and Control Manager and Economic Evaluation and Investment Projects Manager at eni Corporate. During his career Andrea gained vast experience in finance and accounting working in major Italian companies like FIAT Group and Alitalia. He has international background focused in cost control and financial activities management having worked in various countries worldwide including the UK, Angola, Thailand, Turkey, Spain and Germany. Joined KPO in 2011 as Finance Controller and appointed as Finance Director in 2012.



Brian Essner
Marketing Director

Brian joined KPO as Marketing Director in 2012 from BG Group. Most recently Brian was a member of the asset leadership team responsible for BG's US shale joint venture and previously held various roles in BG's LNG Trading organization with specific focus managing BG's global LNG supply portfolio. Brian has extensive experience in integrated energy management, multinational negotiations, energy marketing, commercial and business development with material success in Egypt, Equatorial Guinea, Nigeria, Trinidad & Tobago and the United States, among others. Before joining BG Group, Brian held various positions in Panhandle Energy's pipeline, storage and LNG businesses.



Ian Brown-Peterside
Legal Director

Ian has extensive international experience and has worked in various jurisdictions around the world. He has been with BG Group since 2006, first in Nigeria and then in Kazakhstan, specialising mostly in contracts, compliance and governance leadership. Prior to joining BG, Ian worked in the London, Hong Kong and Tokyo offices of the international law firm Herbert Smith LLP. Joined KPO in 2013 as Legal Director.

CORPORATE GOVERNANCE

KPO DIRECTORS AND CONTROLLERS



Nurzhan Kamalov
Government
Relations Director

Nurzhan has over 20-year work experience at the Karachaganak Project. During his long career in the oil and gas industry Nurzhan took a number of top managerial positions in the Karachaganak Venture. His recent posts include Government Relations & Corporate Affairs Executive Controller and Corporate & HSE Controller. Currently Nurzhan is responsible for the social infrastructure projects, government relations and external affairs including key relationships with the RoK Authority, government bodies, international and national media. Nurzhan had been the Chairman of the Kazakhstan Petroleum Association's Board of Directors from 2007 till 2012 inclusive.



Christopher Circuit
Services Director

Christopher joined KPO from BG Group where he worked for over 25 years and gained extensive experience in general management delivering a wide range of business services in BG joint ventures in India, Thailand and Northern Ireland. During his career at KPO Chris held various senior roles, including Senior Business Relations Adviser, where he was responsible for key stakeholder relationships and development of Compliance framework, and Corporate Governance Controller managing Governance framework to ensure effective and efficient control of processes and procedures.



Matteo Tisi
Project Execution
Director

Matteo has been with eni since 2005, formerly as Project Manager for development projects in the Russian Federation and Turkmenistan. Matteo's professional experience includes work as Project Manager in Sambursky Development Project in Western Siberia. Prior to joining eni Matteo worked for Tecnimont, an Italian company specialised in engineering, procurement and construction services for oil & gas, chemical and power plants. Joined KPO in 2012 as Project Execution Director.



Alberto Meanti
Project Development
Director

Alberto has worked in the oil & gas sector for over 20 years, of which nearly all with eni. During his career Alberto implemented a number of projects involving development of large-scale plants and production projects mainly in West Africa, the Gulf of Mexico and the North Sea. Prior to joining KPO, Alberto held a position of Development Director and Deputy Managing Director for eni in Iran. Joined KPO in 2011.



Cristiano Gioacchini
HSEQ Controller

Prior to KPO, Cristiano was HSE Manager at Agip KCO responsible for the Kashagan Project Experimental Programme. In that role Cristiano managed HSEQ of both onshore and offshore projects with a workforce of over 40,000 in 2010. Previously Cristiano held a number of HSE and QA managerial roles at eni subsidiaries and EPIC Contractors in Italy, Ireland, and Russia. Joined KPO in 2011 as HSEQ Controller.



Steve Wright
HSEQ Controller

Steve has wide work experience in Health, Safety, Security and environmental management. Before joining KPO he held a position of Corporate Safety Manager and Regional HSSE General Manager at BG Group During his career Steve worked in various major UK companies like Transco and the National Grid specialising in such areas like risk management process, development of HSSE strategies and management systems, operational HSSE systems, leading incidents and crisis recovery. Joined KPO in 2012 as HSEQ Controller.

CORPORATE GOVERNANCE



Cesare Alberti Di Catenaja
Corporate Governance Controller

Cesare has rich experience in oil and gas exploration and environmental management. In his 30-year career he worked in different eni's exploration and production projects in Italy, the Netherlands, Algeria, and Norway. His most recent positions were of Exploration Manager of AGIP KCO in the Hague for the Kashagan Project and Environmental Manager for E&P division of eni in Milan. Cesare joined KPO in 2010 as Corporate Governance Controller. The focus areas in the current position include internal audit, business planning and performance, value assurance and sustainability.



Trevor Munday
Corporate Governance Controller

Trevor has been with BG Group for over 10 years working internationally in financial and information technology roles. Prior to this he worked for Price Waterhouse Coopers as Management Consultant in their technology practice, working internationally with oil and gas clients. Trevor was appointed as KPO Corporate Governance Controller in 2011.



Zaure Alzhanova
HR Controller

Zaure has strong professional background in HR management having worked in senior management roles in both national and international companies in Kazakhstan. She has worked for BG Group for over seven years, most recently as Vice President for Human Resources at BG Kazakhstan in Astana. Zaure is a Fellow Member of the Chartered Institute of Personnel and Development in London and an MSc HRM qualified graduate.



Marco Castelli
HR Controller

Marco has more than 16 years of experience in human resources and over 12 years in management roles on a variety of assets in Italy, Congo, Angola, Iran, Egypt and Kazakhstan. Prior to joining KPO in 2011, Marco worked in Cairo (Egypt) as Staff Manager in IEOC, eni branch..

CORPORATE GOVERNANCE

MANAGEMENT SYSTEMS

In all aspects of its activities and in accordance with the FPSA, KPO operates to internationally recognized standards which are implemented in the Company 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.

In 2009, following intensive work conducted by the Operators Sustainability Working Group, KPO issued its Sustainable Development Charter. This charter is intended to lay 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 at www.kpo.kz and on the Company's intranet portal.

RISK MANAGEMENT

Within KPO there is a formal Risk Management process to identify and effectively manage the business risks facing the Company. This process as well as roles and responsibilities are defined within the Risk Management Manual. Corporate Governance Controllershship facilitates the risk management system in place and is responsible for maintaining the Corporate Risk Register which contains the risks and associated action plans and controls in place for all risks facing KPO at a Company level. The top Corporate risks are reported to and discussed by the KPO Senior Management at quarterly Risk Committee meetings. After each Risk Committee, the Corporate Governance Controller provides the Contractors Committee with the quarterly Risk Register Report which details the top 20 risks facing the Company.

Due to the nature of our business, sustainability risks are of primary importance for us. Such risks include potential disagreement with stakeholders regarding Karachaganak development, 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, and related reputational impacts. We regularly review these risks at our Risk Committee and aim to reduce their impact. 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 5 years has been a learning opportunity for KPO, as it has improved interdisciplinary cooperation within the Company, 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 within GRI. The overall reporting process contributes into regular improvement of business processes and helps us to gain a more holistic understanding of our organisation.

ASSURANCE

All these systems and policies are subject to audits, which provide 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 which audits all of KPO's activities. Specific areas are identified for audit each year using the KPO's internal risk management process, discussions with directors, Parent Company requests and the KPO's own Audit Model, which details KPO process areas and the required

audit frequency for each area. In 2012, 12 internal corporate audits were undertaken covering such topics as ethical due diligence and inventory management.

External assurance reviews also occur on a regular basis, including an annual Parent Company Audit to ensure KPO complies with its own policies and standards and industry best practices, and regulatory reviews to ensure compliance with the Republic of Kazakhstan legislation. In November 2012, two Parent Company Audits were held by the four contracting companies eni, BG, Lukoil and Chevron to review the issues on Compliance, Delegation of Authorities, Finance, HR, Inventory Management, External Relations and Reputation and IT. eni and BG conducted HSE Operator audit in July 2012.

COMPLIANCE FRAMEWORK

Code of Conduct

The Compliance Framework regulates and provides guidance on all aspects of Compliance throughout the Company and establishes the 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 September, 2012.

The Compliance Framework is managed by the Legal Compliance Counsel and Compliance Coordination Manager, both of whom work in the Legal Directorate. KPO has the 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 to review all matters relating to Compliance in KPO.

CORPORATE GOVERNANCE

Training

During 2012, classroom-based training was provided to 1,069 employees, including all new starters, on the Code of Conduct and other Compliance requirements. The objective is to reinforce a culture of ethical behaviour in KPO, ensuring that each KPO employee knows what is expected of him or her as a KPO employee. This training involved approximately 81 separate training sessions taking 1.5 hours each, with an average class size of 13 employees.

The Compliance Department also provided Anti-corruption training courses for 333 employees, with the average number of 18 employees per training group. These 1.5-hour training courses have covered the Contracts & Procurement, Warehouse and Logistics, Travel Section, Visa Section and Transport Departments' personnel. These departments interact regularly with government officials, and KPO wants to ensure every employee is aware of the risks of facilitation payments and bribery.

As a rule, all KPO personnel are required to read the Code of Conduct, Conflict of Interest and Compliance Assurance Policies on the KPO intranet and confirm having read each of these policies every year.

Hotline and other compliance measures

In February 2012, a toll-free, anonymous and confidential Hotline was introduced in KPO as another step in the Company's legal compliance programme. An agreement with an international supplier of hotline services was signed with KPO.

This Hotline is available 24-hours a day for employees to report 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 misconduct. KPO is then provided with the report, which is then considered to determine the appropriate action. A report of the action is provided to the hotline provider to allow

feedback to the caller.

During 2012, KPO received 15 reports on the Hotline (with some duplication), which were duly considered and the appropriate action taken. Most of the complaints related to Human Resources issues and these were addressed accordingly.

With the implementation of the Hotline, KPO meets one of the measures of the international standards for combating bribery and corruption, and provides an important forum for the KPO's employees and contractors to ensure a fair and safe working environment. It is a KPO's annual objective to ensure that all employees are made aware of their individual obligations under the Code of Conduct. A set of policies are placed on the KPO intranet for each employee to read and acknowledge having read the policies. Employees that don't have access to the Intranet are provided with hard copies and a signed acknowledgement is obtained. By end of November 2012, the on-line Compliance Declaration had been confirmed by all KPO employees. The Legal Directorate also maintains a set of registers whereby compliance related matters are recorded, for example, any hospitality and travel provided for non-KPO persons, thefts of KPO property and the resulting investigations, any corporate gifts and hospitality received by the KPO personnel, and a special register to record any allegations of corruption.

Anticorruption due diligence process

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

- The RoK legislation on bribery encloses three types of responsibility for receiving/giving a bribe as well as mediation in bribery;
- RoK Criminal Code - Articles 231 (commercial bribery), 311 (receiving a bribe), 312 (giving a bribe) and 313 (mediation in bribery);
- RoK Administrative Violations Code – Article

533 (giving a material compensation), 533-1 (receiving a material compensation);

- 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 relevant laws of the RoK and compliance legislation of the home countries of the Contractor companies and these obligations are incorporated in KPO's model 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 in corporate governance is the prevention of corruption, bribery and money laundering.

A key feature of governance and relevant legislation is to "know your business partners" and to request that your partners provide certain information with regards to their undertakings in respect of their activities and operations. KPO has introduced the Ethical Due Diligence programme to determine the risks associated with each entity and to introduce mitigation measures to those aspects that may pose a risk.

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 the KPO's high standards of ethical business. KPO sends out a questionnaire to enable it to carry out a risk assessment based on the information provided, and on international databases providing corporate information.

KPO has assessed 472 companies during the year, which included new and existing companies on the KPO contractors' database which required a re-assessment. A total of 180 new entities were added to the data base.

CORPORATE GOVERNANCE

As part of KPO’s implementation of the process, KPO also assists local companies to comply with our ethical requirements. The Contract & Procurement Department provides local companies with pro forma documents, through which they would be able to draft their own Code of Conduct and revise their contract documents

that would be used to subcontract or procure services, equipment or materials.

STAKEHOLDER ENGAGEMENT

We hold a strong commitment to stakeholder engagement, and our identified major stakeholder groups are listed in the table below, including the names of relevant KPO

Departments, the forms and regularity of engagement. The key issues and topics of engagement with the KPO key stakeholder groups are described in relevant Chapters of this Report.

Also, KPO developed the Government Stakeholder Matrix which identifies the key RoK stakeholders along with the areas of interest, modes of engagement and KPO contacts.

Stakeholder Engagement Matrix

Stakeholders		Sustainability related Company functions												
Major Groups (Level 1)	Level 2	Legal	Marketing	External Affairs	Corporate Environment	Corporate Safety	Field HSE	Health	Local Content	Contracts & Procurement	HR	Social Infrastructure Projects	Community Relations	Forms of Engagement
Parent Companies	BG Group, eni, Chevron, Lukoil, KMG	weekly	daily		monthly	quarterly	annually	quarterly	quarterly		daily, monthly		quarterly	Reports
Authorised Body	PSA	weekly	daily	annually	monthly	annually	annually		monthly	daily	quarterly	quarterly	semi-annually	Reports, meetings
Employees		daily				daily	daily	daily	daily		daily		monthly	
Trade Unions		annually				semi-annually		quarterly			weekly			
RoK Government	Ministries (relevant to each dept)		bi-monthly	bi-monthly	bi-annually	quarterly	quarterly	quarterly	quarterly		quarterly			Report to MOG
	Local and regional authorities	quarterly		bi-monthly	monthly	monthly	monthly	monthly	quarterly		weekly, monthly	weekly	bi-monthly	Report to Labour dept
	Customs		daily											
	Courts	daily									quarterly	daily		
Counterparties	Suppliers / contractors	weekly	daily			monthly	quarterly	bi-monthly	quarterly	daily	daily			day-to-day issues
	Customers		daily					bi-monthly						
	Financial Institutions (Banks)		weekly											
Business Partners	Oil & gas companies			quarterly		quarterly	annually		quarterly		annually		semi-annually	conference
	Business associations			quarterly					quarterly			quarterly		
Media	National / Regional / Local			daily					bi-monthly			quarterly	bi-monthly	
Local Communities	Aksai and nearby villages citizens				quarterly		bi-monthly	quarterly					bi-monthly	
Activists	NGOs (international & local)								quarterly				monthly	
	NCOs (sponsorship beneficiaries)												monthly	

CORPORATE GOVERNANCE

The KPO's Corporate Communications Policy outlines the mechanisms and processes that KPO uses at a corporate level to communicate internally and externally. It also provides lists of stakeholders with an indication of who within KPO is authorised to engage with external stakeholders. Processes with other relevant stakeholders are determined by several policies and procedures, such as the Stakeholder Engagement Operating Procedure, the Sponsorship and Donations Policy, the Internal Communications Policy, the Memorandum of Understanding (MoU) between KPO, the Burlin District Maslikhat and the Burlin District Akimat on establishment of Village Councils in Communities Located Around the Karachaganak Field and the Local Content Development Programme.

CASE STUDIES OF STAKEHOLDER ENGAGEMENT IN 2012

Contractors

KPO held a HSE forum with its contractors

to discuss the challenges that both KPO and contractors jointly face. At this forum both KPO and the contractors reviewed the ways of maintaining and improving HSE performance using good HSE practices.

The round table discussions held in groups following the presentations gave an opportunity for Contractors' representatives to propose initiatives and recommendations based on the results of discussions with KPO.

Peers and other industry companies

An investment forum was held in Aktau with the involvement of the JSC NC KazMunaiGas and three major oil and gas operators working in Kazakhstan – Karachaganak Petroleum Operating B.V., North Caspian Operating Company B.V. and Tengizchevroil. The main purpose of the forum was the engagement of international companies to organising investment into new production facilities and creation of jobs in the western regions of Kazakhstan.

A delegation of the Kazakhmys Corporation LLC visited KPO. The main purpose of the visit

was the exchange of information and learning about KPO's experience in industrial safety. The delegation of Kazakhmys also visited the KPO production facilities and got acquainted with the practical application of tools, standards, and procedures ensuring safety in the workplace.

RoK Government and Regulatory Authorities

In 2012 Deputy Prime Minister of Kazakhstan Krymbek Kuserbayev visited Karachaganak and met with the KPO management to learn about the current operations of the Karachaganak project. The KPO General Director briefed the delegation on current activities at the Karachaganak field, plans for its further development, and the company's contribution to the region's social and economic development.

In 2012 KPO hosted the Chairman of the RoK Committee on State Control over Emergency Situations and Industrial Safety Nurbek Kunanbayev who was accompanied by the Head of the WKO Emergency Department Kadr Bisembayev.



BG Kazakhstan's workshop for regional non-for-profit organisations

CORPORATE GOVERNANCE

During their visit the guests were briefed on the Karachaganak project development with a focus on industrial safety, emergency response and civil defence issues. Kazakhstan's Vice Minister of Environmental Protection Baurzhan Abdishev visited the Karachaganak oil and gas condensate field, as part of a short working trip to West Kazakhstan Oblast. During a working meeting with the KPO top management the guests were briefed on the operations and environmental performance of KPO.

Employees

During 2012 at KPO various workshops with employees were held, which included a workshop on fundamentals of corporate social responsibility and non-financial reporting, Employee Perception Survey and a Welcome Day for new employees.

Local Communities

KPO established good relationship with local communities in its direct impact area and engages local communities in a dialogue through the Village Councils set up in the four rural areas of the Burlin District in 2005. In 2012, 16 Village Council meetings were held in the adjacent communities in the Burlin District (Berezovski, Uspenovski, Priuralnoye, Zharsuatski rural areas and the Bestau Village). The topics discussed include the social infrastructural, community development programmes and environmental issues.

In 2012 KPO also held a public hearing on the 2013 Environmental Protective Measures Plan, which was attended by local and regional authorities, Maslikhat Deputies, community representatives, media and local initiative groups.

To promote the safety culture among Aksai schoolchildren, KPO representatives visited the studio of Aksai Radio, where they met with schoolchildren of Aksai and spoke about the Road Safety Programme initiated and launched by KPO on the radio in July 2012.

Non-For-Profit organisations

The KPO staff attended a series of workshops

for regional non-for-profit organisations funded by BG Kazakhstan, one of its partner companies, with the involvement of the Civil Alliance of Kazakhstan. Three workshops were held with the aim to strengthen cooperation between government, business and civil society through reaching an understanding of the role of non-commercial organisations in development of communities.

Membership in Associations

KPO is a member of the Kazakhstan Petroleum Association (KPA) and the KPO External Affairs Department staff regularly attends the scheduled meetings of the KPA, where important energy issues, recent changes in the finance, tax, ecological, oil & gas legislations as well as in the legislations of other priority sectors of economy are discussed. KPO Government Relations Director has chaired the KPA from 2007 until 2012.

In 2012 the KPO delegation attended an annual Kazakhstan International Oil & Gas Exhibition (KIOGE) in Almaty and a Kazenergy forum in Astana.

The European Business Association of Kazakhstan (EUROBAK) and the American Chamber of Commerce (AMCHAM) are other associations with the KPO membership.

We view our membership in the above mentioned associations as strategic, because:

- Participation in the meetings of the Business Associations provides us with opportunities to network with other members and the chance to meet top Kazakhstan government, industry, and funding organisations representatives.
- It provides access to resources of the Associations: reports on Kazakhstan economic policy, legislative updates, Government activities and reports, briefings, and seminars with the involvement of Kazakhstan decision-makers.
- Members are invited to participate in Working Groups and Committees on key business issues.
- Members are offered discounts and preferential terms on products and services provided by various companies.



Public Hearing on the 2013 Environmental Protective Measures Plan in the Burlin Akimat



Panel discussion at the Integrated Contractor HSE Forum in Aksai

HEALTH, SAFETY AND SECURITY

At KPO safety is an area of paramount importance. Developing and operating a field of Karachaganak's technical complexity requires every employee and contractor to work safely at all times. All oil and gas operations carry inherent safety risks: at Karachaganak, this challenge is compounded by extreme temperature fluctuations, the high hydrogen sulphide content in the hydrocarbons we produce and process, and high-pressure sour gas injection.

HSE MANAGEMENT SYSTEM FRAMEWORK

The HSE Management System was introduced at KPO in 2008. In October 2012, an integrated surveillance audit on ISO 14001 and OHSAS 18001 standards was held. The audit outcomes confirmed KPO's compliance with the requirements of the respective standards. Company efforts on maintaining the HSE Management System have been appreciated by the independent certification body.

In 2012, the KPO's Health, Safety and Environmental Policy was revised to encompass personal obligations of managers for the safety of their teams in the workplace. The HSE Policy recognizes the aim to protect the health and safety of the KPO personnel and the community, to minimise the environmental impact associated with our business and to assure the integrity and safe operation of our assets.

Managing the risks is crucial for KPO as a company. In achieving a common goal of maintaining a safe and sustainable business, and aligning activities in this area with the Parent Companies expectations, we have revised our approach to asset integrity and industrial safety.

A new concept about the integrity and safe operation of our assets has been introduced: a risk-based approach to the design, construction and operation of facilities has been adopted to guarantee that the HSE risks are assessed and managed across the lifecycle for each business activity. Process Safety and Integrity Management programme has been introduced as an

implementation tool.

The top management commitment to guarantee a safe work place is strengthened by:

- Every line manager is fully committed to being a HSE leader, ensuring the knowledge and application of HSE requirements and acting with the aim of protecting the health and safety of employees and contractors and preventing environmental pollution.
- All employees and contractors recognise their personal responsibility for HSE and the right to openly report any HSE issues of concern. Everyone is encouraged to intervene in the event of unsafe acts or conditions and polluting circumstances, and is empowered to stop the work if necessary.

To assure HSE processes, KPO conduct regular assurance reviews, internal and Parent Companies' audits. In July 2012, Parent Companies also held an audit of the KPOs HSE Management System.

SAFETY PERFORMANCE IN 2012

The KPO's overall safety performance for 2012 and for the previous 7 years is presented on the following pages. Graph 1 shows KPO's overall Lost Time Injury Frequency (LTIF) and Total Recordable Injury Frequency. The curves represent 12 months rolling average for 2012, which is 0.34 for LTIF (0.34 in 2011) and 0.38 for TRIF (0.53 in 2011).

All incidents that occur whilst performing work for KPO are required to be reported and

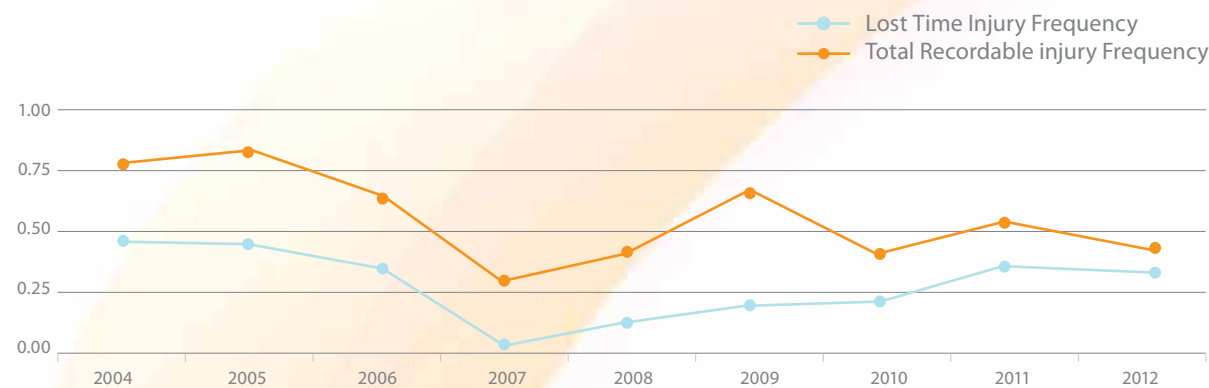
investigated. This message is disseminated and emphasised to all KPO and Contractors employees. KPO Contractors are contractually obliged to report all incidents that occur while performing work on the KPO premises or on premises that are or ought to be under the management control of KPO by contractual arrangement.

Every incident that occurs in KPO is thoroughly investigated and aimed at gathering facts, establishing immediate and root causes, identifying any failures in the management system and providing recommendations to correct the failures and to prevent incident reoccurrence. All incident data is registered in the Synergi database and corrective actions are tracked through the system.

The 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. At the time of writing the report the 2012 OGP data was not available.

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Graph 1. LTI Frequency and TRI Frequency (KPO & Contractors)



The following method is applied in KPO for calculation of frequencies in Graph 1.

LTI Frequency = Number of LTIs (Lost Time Injury + Fatality) x 1,000,000 / man-hours

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

Note: First Aid Cases are not included in Occupational Injury calculations.

The table 1 shows KPO LTIF versus Contractors LTIF.

Table 1. Lost Time Injury Frequency (KPO vs Contractors)

Performance Indicator	2004	2005	2006	2007	2008	2009	2010	2011	2012
Lost Time Injury Frequency (KPO)	0.79	1.04	0.19	0.00	0.00	0.21	0.00	0.71	0.42
Lost Time Injury Frequency (Contractors)	0.37	0.26	0.44	0.07	0.14	0.10	0.23	0.21	0.30

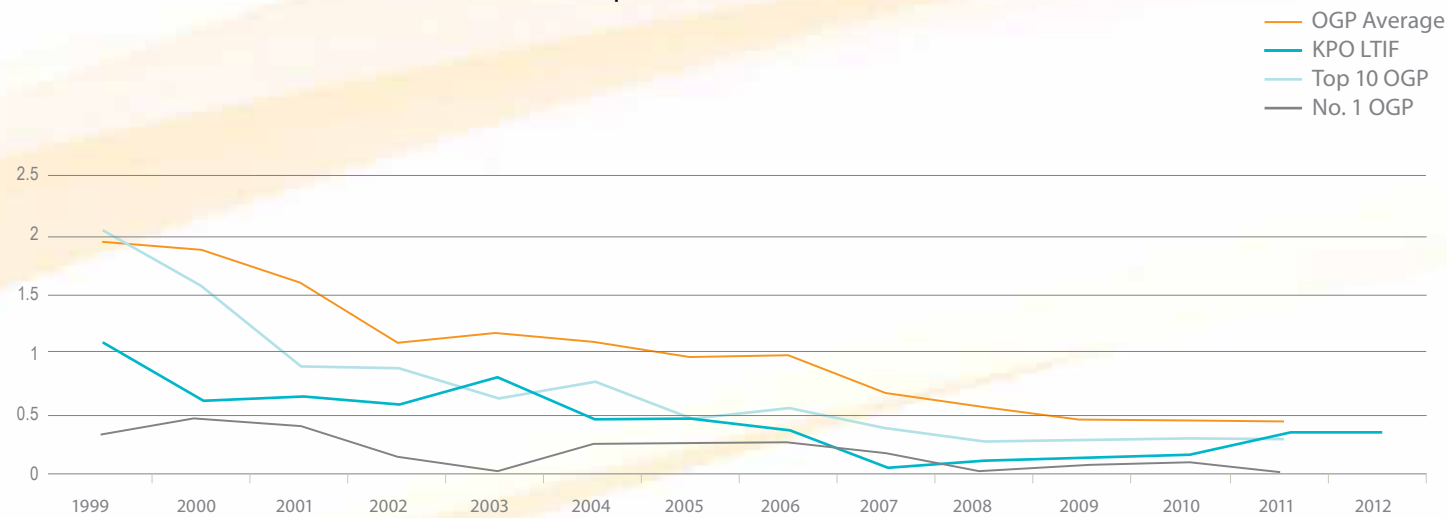
The table 2 shows KPO TRIF versus Contractors TRIF.

Table 2. Total Recordable Injury Frequency (KPO vs Contractors)

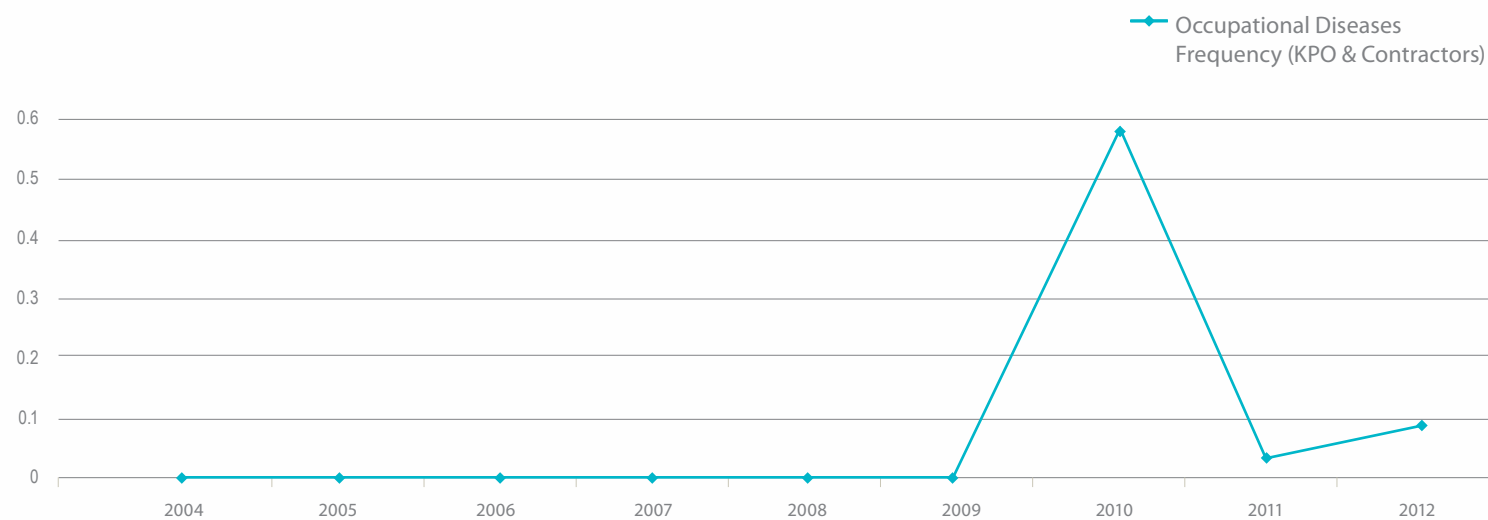
Performance Indicator	2004	2005	2006	2007	2008	2009	2010	2011	2012
Total Recordable Injury Frequency (KPO)	0.99	1.04	0.58	0.53	0.17	0.43	0.11	1.00	0.42
Total Recordable Injury Frequency (Contractors)	0.80	0.79	0.73	0.20	0.45	0.69	0.47	0.36	0.36

HEALTH, SAFETY AND SECURITY

Graph 2. KPO Performance vs OGP



Graph 3. Occupational Diseases Frequency (KPO & Contractors)



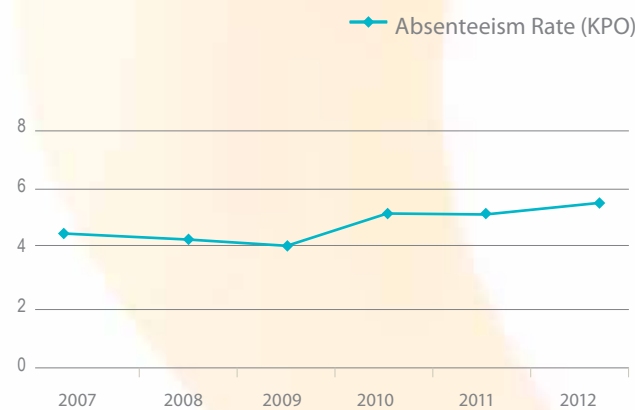
Occupational diseases rate (number of occupational diseases per 100 employees) = Number of occupational diseases x 100 / Total number of employees

HEALTH, SAFETY AND SECURITY

Table 3. Occupational Diseases Frequency (KPO vs Contractors)

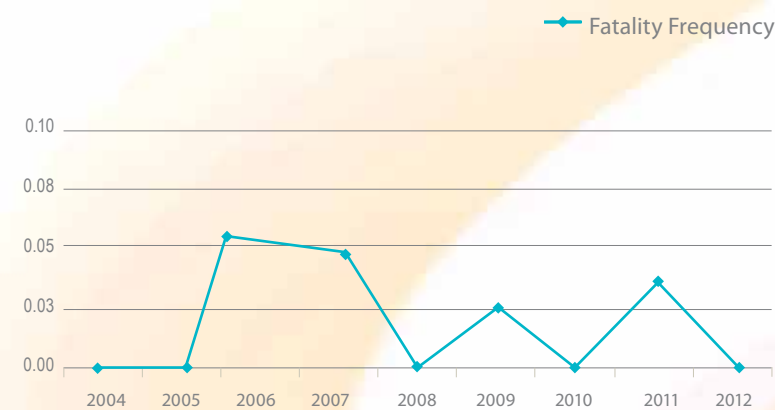
Performance Indicator	2004	2005	2006	2007	2008	2009	2010	2011	2012
Occupational Diseases Frequency (KPO)	0.00	0.00	0.00	0.00	0.00	0.00	2.46	0.14	0.28
Occupational Diseases Frequency (Contractors)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Graph 4. Absenteeism Rate (KPO)



Absenteeism Rate (per 100 employees) = Actual number of days lost due to absenteeism (sick leave) x 100 / Total number of employees

Graph 5. Fatality Frequency (KPO & Contractors)



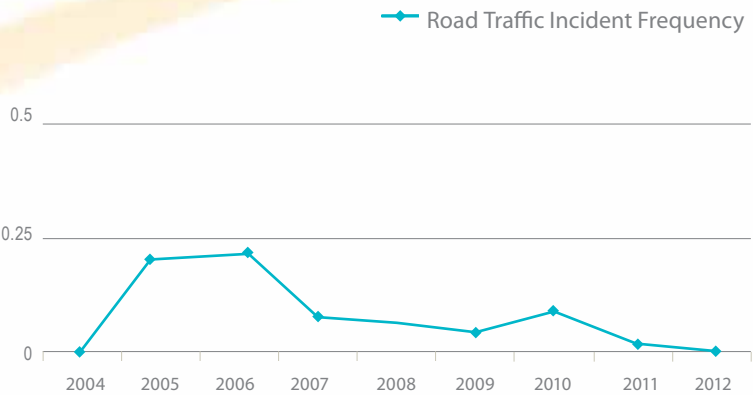
Fatality Frequency (per million man-hours worked) = Number of fatalities x 1000000 / man-hours worked

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Table 4. Fatality Frequency (KPO vs Contractors)

Performance Indicator	2004	2005	2006	2007	2008	2009	2010	2011	2012
Fatality Frequency (KPO)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.14	0.00
Fatality Frequency (Contractors)	0.00	0.00	0.07	0.07	0.00	0.03	0.00	0.00	0.00

Graph 6. RTI Frequency (KPO & Contractors)



Road Traffic Incident Frequency per million kilometres driven decreased from 0.03 in 2011 to 0.0 in 2012. The method applied for calculation of the RTI Frequency is: $\text{RTI Frequency} = \text{Number of RTIs (Recordable)} \times 1,000,000 / \text{km driven}$.

Table 5. Road Traffic Incidents (KPO vs Contractors)

Performance Indicator	2004	2005	2006	2007	2008	2009	2010	2011	2012
Road Traffic Incident Frequency (KPO)	0.00	0.09	0.10	0.21	0.00	0.12	0.13	0.00	0.00
Road Traffic Incident Frequency (Contractors)	0.00	0.24	0.24	0.04	0.06	0.03	0.09	0.02	0.00

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HSE CARD

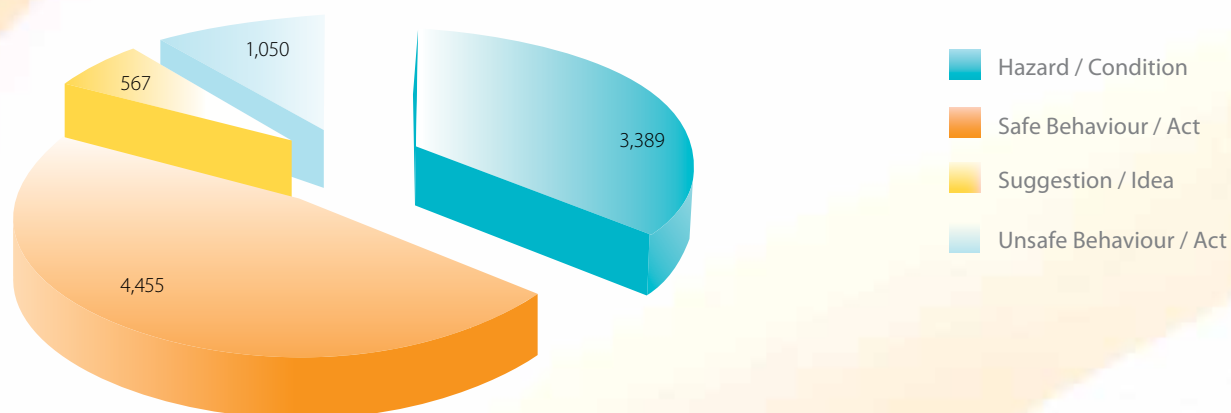
Introduced in late 2011, the HSE Card Programme was developed due to the necessity to have a single reporting system to simplify reporting process, centralise data collection and coordinate follow-up actions. The HSE Card has encompassed three elements, utilized within the Company as individual HSE tools: Hazard reporting, Behavioural Based Safety card and HSE suggestions scheme. Now the HSE Card enables personnel to report hazards and, safe or unsafe acts or behaviour observed during work performance. The Card also provides an opportunity to offer suggestions and ideas to improve HSE performance in KPO.

The HSE Card Programme helps to bring an extra focus and attention to HSE on the work sites, to effectively follow up and track corrective actions to its closure, and to immediately remove hazards and intervene unsafe behaviour, where appropriate. The completed cards are processed and forwarded to the relevant departments and/or units for consideration and follow up. Every operational unit has set up an HSE Card committee to address areas of concern, identify weak points, and discuss findings as well as to recognise and reward safe and positive practice.

As part of the programme improvement, an online version of the HSE Card was introduced to simplify the process of its submission and processing.

In August 2012 an e-learning tool was launched in KPO aimed at familiarising the personnel with the HSE Card Programme principles, ensuring that the employees are able to complete the HSE Card and know how to proceed with it, and familiarizing them with the HSE Card analysis process. In 2012, 70.6 per cent of the KPO staff successfully passed through the e-learning training, which was above the target set by the 2012 HSE Plan. In total, 9,461 cards were filled in 2012. It is worth noting that 4,439 cases of hazard and unsafe behaviour were revealed via the HSE Card Programme in 2012. The annual statistics are presented below.

2012 Results of HSE Card Programme by type of performance:



Among the key events related to the HSE Card performance in 2012, the following can be highlighted:

The KPO employee, Kubaidulla Bektassov, became a winner of the BG Group Golden Hard Hat Award for demonstrating extraordinary safety commitment with outstanding behaviours and ideas. The Golden Hard Hat and the Letter of Gratitude on behalf of Martin Houston, BG Chief Operating Officer and Executive Director, was handed to Kubaidulla during the HSE Card Programme Quarter II Award ceremony. Kubaidulla donated his contest prize of a USD 1,000 to the Local History Museum in Aksai.

Winners of the HSE Card Programme Awards in quarters 1, 2, 3 were announced and communicated across the Company.



Kubaidulla Bektassov, winner of the BG Group Golden Hard Hat Award

HEALTH, SAFETY AND SECURITY

EMERGENCY MANAGEMENT

In order to improve the command and control in emergency response in Karachaganak, the new Level II Incident Management structure was introduced in June 2012. Responsibilities for managing field related and non-field related incidents have been split between the relevant teams within the Company.

Field Related Incidents – Any incidents occurring within the Field area or along the export pipelines including grass fires near process areas, export pipelines that could affect the KPO assets and Level II Response undertaken by the Field Duty Manager together with a dedicated team of specialists (Field Incident Management Team).

Non-Field Related – Any incidents occurring outside the Field boundaries, not related to process activities and facilities. Level II Response is led by the Aksai Duty Manager with a dedicated team of specialists from the Aksai Incident Management Team.

Implementation of the new structure has involved commitment and efforts of the KPO Emergency Response professionals who have coordinated the changes.

A series of specific trainings was delivered to dedicated IMT and CMT members to maintain the high level of personnel expertise and effectiveness in case of emergency situation and further potential escalation of it.

As part of 2012 Level II-III Emergency Response (ER) Training and Exercise Plan, a series of table top



KPO Emergency Response Team during the exercise

scenarios and exercises were conducted:

- to test feasibility of changes in the newly introduced emergency management structure (exercises DOLPHIN and GRIZZLY);
- to test command and control at all levels of the KPO ER Organisation (all mentioned exercises); and
- to test the KPO Emergency Response Procedures, Plans and facilities at all levels following a Significant sour gas leakage at a production facility of the Karachaganak field and involved all levels of the KPO ER Organisation (integrated exercise FLAMINGO).

LIFE SAVERS CAMPAIGN

A company wide Life Savers rejuvenation programme was introduced in 2011 and rolled out throughout 2012. The Life Savers programme comprises of the minimum expectations and requirements of safe practices relating to eight of the most hazardous activities undertaken in KPO. Each topic was separately rolled out to all KPO and contractors' personnel.

Each topic has been supported by roll-out presentations, best practice and subject posters, case studies, hazard awareness cards, HSE leadership tour cards, computer

pop-up messages and E-Learning or training presentations for those without computer access.

The E-learning training was mandatory for all KPO personnel to ensure their awareness of the Life Savers requirements, and general and specific hazards and risks relating to the KPO activities.

Pictograms and barrier tape that describe the main Life Saver requirements in pictorial manner, requiring no translation, along with guidance and explanatory presentations, have been issued to all Company locations where high risk activities are undertaken.

The campaign was also supported with general materials such as notebooks, tri-folds and booklets.

All departmental managers and Contract Owners have been encouraged to cascade the roll-out presentations and training programmes to their contractors and to display the posters.

The Life Saver requirements have been incorporated into site level check lists to enable compliance to be monitored on a daily basis.

KPO plans to issue the remaining topic and roll out the inspection check-lists incorporating Life Saver requirements during 2013.



Road Safety Programme function on the Aksai Radio

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2012 HSE PLAN

The KPO HSE Plan for 2012 was aimed at improving Health, Safety and Environment management, controlling risks and preventing injuries and ill health of the KPO employees and contractors. Day-to-day activities were focused on maintaining the HSE systems, whilst the Plan covered a range of measures targeting continuous HSE improvement.

The HSE 2012 plan elaborated upon the KPO Safety Plan 2011, and comprised of six elements:

1. HSE Leadership and Supervision;
2. Contractor HSE Management;
3. Hazard Awareness and Risk Control;
4. Monitoring, Review and Application of Lessons Learned;
5. Driving and Transportation Safety;
6. Environmental.

To ensure delivery of each of the six elements, a number of key objectives for each element was identified. Each objective incorporated a number of SMART actions that were over and above KPO's day to day business activities and procedural requirements. To ensure accountability, the 2012 HSE Plan was structured so that each element sponsored by a director who was supported by an element coordinator. Individual actions, responsibilities and weighting were developed by each coordinator and approved by relevant sponsors.

All of the 2012 HSE Plan actions and the associated responsibilities and deadlines were recorded in the KPO's Synergi database to enable them to be formally allocated and tracked to closure. At frequent periods, information for each action was collected and reviewed to enable progress to be monitored and reported to the senior management and Parent Companies.

1. HSE Leadership and Supervision targeting to improve HSE leadership and intervention techniques within KPO.

Effective HSE Leadership training was delivered to Level 1, 2 and 3 Managers to emphasize the main principles of the HSE Leader's behaviour, the concept and rules of the HSE leadership tours and discuss the set of activities as part of the HSE Leadership indicators identified for each group of the KPO Managers. The HSE Leadership tours continued throughout 2012 and have become an effective and proactive tool to demonstrate management's commitment to HSE issues, building two way communication with the workforce and promoting HSE throughout KPO and contractor organisations.

The HSE Climate Survey was launched in KPO covering both the KPO and contractor employees. The purpose of the survey was to collect open views of the company and contractor employees on HSE activities and understand the inputs and variables that positively or negatively influenced the HSE culture climate within KPO.

The survey results have shown that employees' perception was very positive in such areas as motivation to comply with HSE requirements and leadership team's commitment to HSE issues. HSE communication, knowledge and training, willingness of employees to participate in HSE initiatives was highlighted by the survey as areas of positive perception.

At the same time the Company needs to consider and act upon such issues as hazards in the physical work environment, further work on the problems of safety systems to ensure the satisfaction of all organisation layers with the HSE procedures and standards. The need to further assess line managers and supervisors commitment was recognised to ensure a two-way communication channel is maintained and important HSE messages are delivered positively to the workforce.

It is important to recognise that the level of safety culture assessed through the safety attitudes perception surveys is subjective, and there is a number of factors that can lead to the results being over or under-optimistic compared with

the actual position.

The survey results will help shape the 2013 HSE Plan and 2013-2016 HSE Strategy.

2. Contractor HSE Management targeting to improve the Contractor HSE management process.

Significant changes and update of the KPO processes and procedures to improve the KPO Contractor HSE Management throughout the contract lifecycle have continued to be implemented throughout 2012.

The following key deliverables have been achieved in 2012 that were prepared in taking into account the necessary requirements relevant to the level of HSE risk of the contract:

- Contract HSE Risk Ranking Methodology
- Risk based vendor assessment criteria;
- Updated Contract HSE requirements in proportion to the level of HSE risk (Schedule D);
- Contract Amendment procedure;
- Guidelines on the preparation of a scope of work
- Guidelines for contractor meetings.

The roll-out of the documents and changes to processes were supported by numerous training sessions, briefing notes and one-to-one support provided to the KPO personnel involved in contractor management. Contract Owner roles



HSE Forum with KPO contractors

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and responsibilities training has also continued throughout 2012.

Work is ongoing to finalise the Contractor HSE Plan Preparation Template and the Contractor HSE Performance Management Strategy comprising of the HSE Performance Scorecard which will be issued in 2013 along with further training and the implementation effectiveness review of new and updated processes.

During the year KPO has held two Forums with contractors on HSE topics:

- The Integrated Contractor Road Safety Forum in May 2012;
- The HSE Forum with KPO contractors in October 2012.

3. Hazard Awareness and Risk Control

KPO conducted a study on Field Wide emergency response aimed at identifying and documenting the risks not already considered in the safety case associated with KPO activities in the development of KOGCF which could have a fieldwide impact on people, environment, assets, and reputation. The study included the gap analysis of current emergency response arrangements and identified improvement options.

As a part of the HSE Competency assessments and assurance, KPO conducted assessment of 143 KPO Line supervisors. It has been revealed that the level of competency of 38 per cent of the KPO Line Supervisors needs improvement. The action plan to address these findings has been scheduled to be developed in 2013.

4. Monitoring, Review and Application of Lessons Learned

As part of this element KPO has reviewed check lists for Level 3 HSE inspections which assess workers' compliance with KPO procedural requirements. In order to monitor compliance with the Life Savers requirements, questions specific to every Life Saver topic were also incorporated into the dedicated check lists. A uniform database for Level 3 inspections was

developed and adopted at all units to enhance the control of corrective actions and ensure consistency in data entry and further analysis.

5. Driving and Transportation Safety

In the last few years KPO has been implementing a number of initiatives on a regular basis to improve the Company drivers' ability to drive safely, often in harsh conditions. These include the organisation of dedicated safe driving courses, implementation of mobile road patrols, and the installation of in-vehicle monitoring systems on all company vehicles. Road safety in the local community during 2012 was followed up via awareness campaigns among school children of Aksai, by conducting competitions on local radio and presentations about children's road traffic trauma at local schools. The following key deliverables have been achieved in 2012:

- Development of a Road Safety Code which was issued and distributed during the year;
- Update of the KPO's Transport HSE procedure and other road safety procedures;
- High visibility campaign of vehicle and driver document checks, some of which were performed by Directors themselves;
- Review and revision of high risk traffic areas in the Field and subsequent activities, such as road marking, pedestrian crossings, installation of speed bumps, road signs and transportation route change have been carried out;
- Electronic information boards were installed at three security gates in the Field showing data about weather conditions and other useful information to drivers;
- At the Contractors HSE Forum in May, the presentation on the use of winter tyres and in-vehicle monitoring system was communicated.

In accordance with the KPO HSE Plan 2012, consultants on Defensive Driving course have been invited to visit our company targeting the following:

- Independent verification of the Defensive Driving Course (both theoretical and practical parts) held by KPO instructors;
- Consultation on winter tyre use on heavy vehicles and buses owned by KPO and its contractors based on the Manufacturer recommendations, industry practice in other countries and period of operation in KPO;
- Familiarization with work of the Road Safety and Transport Department and preparation of recommendations for improving the departmental performance.

KPO believes all these activities have supported the reduction in the Road Traffic Incident Frequency (road traffic incidents per million kilometres driven) from 0.03 in 2011 to 0.00 in 2012.

6. Environment

A comprehensive description of the KPO environmental performance is given in the relevant chapter of this Report on pages 40-51. Three major environmental activities have been included in the HSE Plan for 2012:

1. *Raising the level of environmental awareness for the field personnel*

KPO is focused on raising awareness of its employees on environmental regulatory requirements, current procedures and international standards. One such action was holding workshops for 'Development of environmental awareness for field personnel'. As part of this campaign five on-site workshops were arranged in the field and Atyrau terminal oil pumping stations (OPS). 88 company employees attended the workshops and provided positive input on the quality of communicated information.

2. *Development of technologies for soil and water reclamation after oil spill or well blow out*

This project commenced in November 2012. The purpose of this project is to investigate and select best available technologies for the

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restoration of soil, surface and underground water applicable to specific conditions of the KOGCF, as well as to reduce waste generation quantity.

Guidelines on the reclamation of soil, surface and underground water contaminated as a result of hydrocarbon spill applying best acceptable treatment technologies at the KPO facilities are scheduled to be submitted for the management's review. The project is expected to be completed in June-July 2013.

3. *Implementation of the Biodiversity Action Plan is described in the relevant chapter on page 51.*

KPO HSE Plan 2013

To support the KPO's HSE Policy, a 4-year strategic HSE Plan has been developed, providing an overview of the strategic HSE goals for the period 2013–2016. The primary purpose of the strategic plan is to be used as a reference for the senior management for planning and implementation of HSE initiatives to ensure that the Company conducts its business without injury or illness to its people and minimising its impacts on the environment whilst reaching its full potential in exploration and production activities.

For key elements of the HSE Management System, the plan identifies where KPO is now and where the Company would like to be in four years' time with objectives defined to enable these goals to be achieved. Each year an annual HSE plan is developed to break down the long term objectives into annual targets and initiatives.

The annual KPO HSE Plan for 2013 has been developed and builds upon the success and lessons learnt of HSE plans from previous years with a structure that recognises the different needs, priorities and diverse range of activities across the directorates whilst working towards a common purpose of HSE improvement.

Building on similar themes for HSE improvement (elements) from previous years it comprises of an overarching HSEQ Controllership work plan for the continuous improvement of the overall

HSE management system throughout the Company which is then supported by individual work plans for each Directorate. Each work plan comprises of actions that are over and above the day to day activities of the Company and will be implemented throughout 2013.



OCCUPATIONAL HEALTH

KPO views the Occupational Health Management as an important element of the Health, Safety and Environment Management System aimed at preventing occupational illness, promoting good health and wellbeing of employees and providing emergency medical support to the Company. The delivery of successful Occupational Health services is only possible if there is a top and line management commitment to supporting the execution of the Occupational Health and Medical Support Program. For example, a No-Smoking Policy, which imposes the total ban on smoking in all indoor facilities, aimed to reduce heart disease and lung cancer in the workers, is enforced by establishing designated places for smoking. A strict requirement to wear seatbelts reduces chances of serious injuries in case of motor vehicle accidents.

The Health Department, structurally a division within the Human Resources Controllership, is functionally closely integrated with the HSEQ Controllership, Operations, Services and other

Directorates, and carries out two main streams of activities, Health Protection and Health Promotion. Its Medical Support Section is a 62-strong team of doctors, feldshers and drivers with a fleet of state-of-the-art ambulances based in four fully equipped clinics in the Field and Aksai, which provide a 24/7 emergency medical service. All the doctors and feldshers are qualified in accordance with the national and international standards and undergo regular refresher training; and the ambulance drivers have completed an international First Aid for non-medical staff training course.

The addition of two heavy-duty ambulances has further enhanced the capacity of the medical service to respond to emergencies, including multiple casualty accidents.

The opening of another clinic, in the Pilot Camp, is underway, with all the reconstruction works completed and the application for a state license submitted.

In accordance with Government Resolution of the Republic of Kazakhstan dated January 25, 2012 № 166 "On approval of list of harmful factors, professions, in which compulsory medical examinations are required", the electricians now undergo daily pre-shift check-ups in the Field clinics, along with the drivers, operators and mechanical technicians.

Health Risk Assessment forms the foundation for the other elements of the Occupational Health Management System. All safety-critical jobs in the Field have been risk-assessed and Job Risk Profiles created for each position.

The risk-based fitness to work examination determines if an employee is fit for the specific job and also forms the baseline data on personnel health for future comparisons. The same medical provider carries out statutory medical examinations and provides medical insurance, which helps to ensure patient care continuity, consolidated reporting and sole accountability.

One of the objectives of the sustainable development of the country is increasing life expectancy of the population through the introduction and enhancement of health

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improvement mechanisms. It can only be achieved by a radical shift from clinical medicine to preventive healthcare.

The KPO medical staff is at the forefront of this activity delivering lectures, presentations and health bulletins to the operational personnel.

KPO supports the State Healthcare Program “Salamatty Kazakhstan”. In 2012, the Health Department arranged for the KPO employees of certain age groups to undergo medical screening in the Aksai Hospital. The non-Aksai residents were given an opportunity to visit clinics at their residential address. This screening is intended to identify early signs of serious medical conditions in people which will prompt timely intervention.

The close liaison with the local public health authorities and the Aksai hospital was further enhanced in 2012. The Health Department participated in several “round table” meetings arranged by the Burlin State Sanitary Surveillance Department aimed to improve communication between medical organisations and professionals, engage in skill-sharing and provide up-to-date information on health-related matters.

Interteach, the principal medical provider for the KPO national employees and their family members, has opened a new clinic in Uralsk in 2012, expanding their capabilities by introducing such services as immunological testing and highly qualified specialist consultations, etc.

A fully licensed and well-equipped sanitary laboratory has continued to carry out statutory workplace monitoring. The measurement results are used not only for reporting purposes, but also to identify non-compliances with industrial hygiene norms and to implement corrective actions. The highly skilled hygiene specialists conduct food safety inspections of canteens, carry out workplace assessments and provide consultancy support to all KPO departments.

As members of several employer committees, the Health Department representatives provide general and occupational medicine perspective

on the discussed subject-matters, which should go a long way towards ensuring that health aspects are covered. Among these forums are the Incident Investigation and Occupational Illness Investigation Committees, the Workplace Attestation Committee and Compassionate Grant Committee.

Noise-induced hearing loss remains a major occupational health issue, hence the importance of the Hearing Conservation Program. The warning signage, noise-mapping, continuous monitoring, health surveillance and employee education were all reviewed in 2012 and further improvements implemented.

KPO recognises cardiovascular disease as one of the main medico-social problems affecting the long-term health and wellbeing of both the Company employees and the community. The cardiac health promotion program is a high priority activity which has set a target of increasing the employee awareness of cardiovascular disease risk factors, the importance of a healthy lifestyle, diet and physical exercise. Health promotion leaflets and posters, presentations in the Company's Intranet, tool-box meeting lectures are all part of the program.

KPO strives to provide its employees with ergonomically designed equipment, machinery and workstations in order to optimize the workers' wellbeing and system performance. The Company's occupational hygienists carry out systematic and “by-request” assessments to ensure that ergonomic hazards are identified and action is taken to reduce associated risks.

The Occupational Health Management System was audited by various internal and external auditors in 2012. There were no major non-compliances with RoK regulations and Partners' health standards. All findings were analysed and action plans developed.

SECURITY

Security at KPO is an expectation, a strategy and is integrated into the KPO business process. Security risks and challenges vary across KPO work activities and multiple locations. These challenges are dynamic and due to this fact KPO is continuously striving to mitigate security risks by prudently identifying, anticipating, preventing, investigating and responding to internal and

external threats. Security awareness by everyone is critical at all times. At KPO all employees are expected to sustain and promote security culture and vigilance. These supportive actions imply wearing ID badges in KPO premises, ensuring the security of Company sensitive information in electronic and print, and constant cooperation with the security provider.

Security encompasses a wide range of activities from the physical protection of our employees, offices and facilities to the safeguarding of our information. Constant efforts are made to improve security throughout KPO by employing technology, like Electronic Access Control, CCTV, and others to assist our security measures.

High intensity patrolling, vigilance and engagement with communities along the length of the pipelines are essential to minimizing illegal tap activity. Every five years KPO holds pipeline inspections by pigging operations to mitigate the risks of illegal tapping and in the future KPO is planning to have such inspections every three years. The diagnostic studies of the pigging inside the pipeline provide detailed information on any interventions or irregularities to the pipeline body.

In 2012, one attempt of illegal tap has been registered close to the Bolshoi Chagan pumping station. No product loss or damage to the environment has been recorded. Additionally, a number of irregularities have been eliminated thanks to the pigging procedure.

Monitoring of illegal tapping is to the benefit of not just KPO but also to local people and the environment. The State Security, Police, Law enforcement bodies and KPO seek stiff penalties against perpetrators.



New heavy-duty ambulances

CARING ABOUT THE ENVIRONMENT

Delivering leading environmental performance in the technically complex Karachaganak Field is a constant challenge. KPO deploys world-class techniques and innovative technologies to protect the environment we operate in and to contribute to global efforts tackling climate change.

Following the principles of sustainable development is a priority for KPO while conducting its operational activities. The core commitments of the Company's HSE Policy are: to minimize negative impact on the environment, to reduce environmental pollution level, and to ensure protection of environment and environmental safety. The Company performs purposeful works to ensure the standard Environmental Protection values, to reduce greenhouse gas emissions and to save natural resources by introducing best available technologies. To achieve this objective, KPO develops the Environmental Protective Measures Plan (EPMP) which is approved by the Ministry of Environmental Protection in accordance with section 10 of the Republic of Kazakhstan's Environmental Code. The activities included into the Environmental Protective Measures Plan correspond to 'The Model list of environmental activities' approved by RoK Environmental Minister's Order No. 119-p dated April 24, 2007.

KPO invested KZT 34.3 billion (USD 239.4 million) of its own funds for the implementation of the EPMP since having assumed operatorship functions of the Karachaganak field from 1998 to 2012. Successful implementation of air protection and environmental resources conservation measures have enabled the following results to be achieved

- Significantly reduced the volume of pollutant emissions into the atmosphere, resulting from production of hydrocarbons, such as:
 - Emissions of pollutants were reduced by 16 per cent over the last five-year period;
 - Specific emission per 1 million tons of produced gas was reduced by 33 per cent; and
 - Gas utilization reached 99.87 per cent;

- Discharge of wastewater into the environment has been eliminated, as treated wastewater from the KPO facilities is discharged into isolated accumulation ponds that prevent pollutants from entering into surface water, ground water and soil;
- Drinking water is not used for technical purposes, but is exclusively used for domestic needs of field's units;
- Use of water from natural water bodies for production needs was reduced down to 100,000 m³ per year due to reuse of recycled wastewater;
- Over 1,000 hectares of disturbed land, after well operations and construction works, have been reclaimed;
- The quantity of waste disposed within the KPO units was reduced by 37 per cent and waste disposal increased by 57 per cent; and
- Since 1998 over 1.3 million trees and bushes across the area of 500 hectares within the KOGCF and SPZ areas have been planted.

According to the EPMP in 2012, 37 environmental measures were planned to be implemented. The estimated costs for implementation amounted to KZT 2.34 billion or/ USD 15.9 million. The results for 2012 included:

- Four measures were fully completed;
- Of 31 long-term measures the scope of work is to be continued in accordance with completion dates set by EPMP;
- Two measures are at the stage of completion.

Actual funds spent for implementing environmental activities in 2012 amounted

to KZT 3.752 billion or / USD 24.9 million. The Table 1 shows the detailed breakdown of costs by the EPMP sections. Environmental measures implementation costs are in line with data of 2012 KPO EPMP implementation report and the state statistical IEM report (Investment into environmental activities and projects).

Table 1.

Group of environmental measures	Actual costs in 2012, million KZT
Air Protection	1,186
Water Resources Conservation	849
Land Conservation	164
Subsurface Conservation And Rational Use	80.5
Flora and Fauna Conservation	106.7
Production and Consumption Waste Management	984
Implementation of management systems and best available safe technologies	21.6
Scientific Research Support (Environmental Studies)	331.6
Radiation Safety, Chemical Safety, Biosafety	0.33
Environmental Awareness and publicity	28.6

CARING ABOUT THE ENVIRONMENT

EMISSIONS TO AIR

KPO performs air emissions management activity on the basis of limits specified in the Environmental Emissions of Pollutants Permit. Within the last few years KPO has operated without exceeding the set limits. Nevertheless, KPO continues to search for ways to reduce air emissions generated in the process of hydrocarbon production. For the last three years the total air emissions were reduced by 3 per cent as shown in Table 2.

Table 2. Dynamics of air emissions of pollutant volumes

Annual volumes of emissions of the following pollutants in tonnes:	2010	2011	2012
Nitrogen oxide	2,205	1,803	1,956
Sulphur dioxide	3,376	3,635	4,957
VOC (volatile organic compound)	953	1,744	1,645
Carbon oxide	2,965	1,199	1,463
Hydrogen sulphide	56	27	29
Solid particles	203	50	88
Others	712	53	78

Note: Calculations of emissions shown in Table 2 are taken from annual air reports 2-TP. Calculation of each constituent was made based on the data regarding each separate unit with application of procedures established in RoK.

In 2012, the Company successfully implemented partial oil recovery during well cleaning processes aimed at the reduction of air emissions. Application of this method enabled the reduction of well operation emissions by 535 tonnes.

For the last three years an overall value of air emissions per one million tonnes of hydrocarbon production has decreased from 0.45 to 0.39 (Graph 1). Compared to 2011, an insignificant increase of specific emissions in 2012 has been caused by an increase of well operations volume from an unusually low volume in 2011.

GAS FLARING

Emissions from hydrocarbon mixture flaring at flare stacks of the process facilities and wells are the main contributors to the total volume of KPO emissions. In 2012, the volume of gas flaring was equal to only 0.13 per cent out of the total volume of gas produced by KPO or 0.78 tonnes per K tonnes of produced crude oil (according to OGP report for 2011, the similar world-wide average indicator is 15.7 tonnes per K tonnes, European average – 3.6 tonnes per K tonnes). 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 of flared gas volume by approximately 65 per cent (see Graph 2) compared to 2011 is not an indication of a sudden increase but is explained by an unusually low volume of well operations performed in 2011.

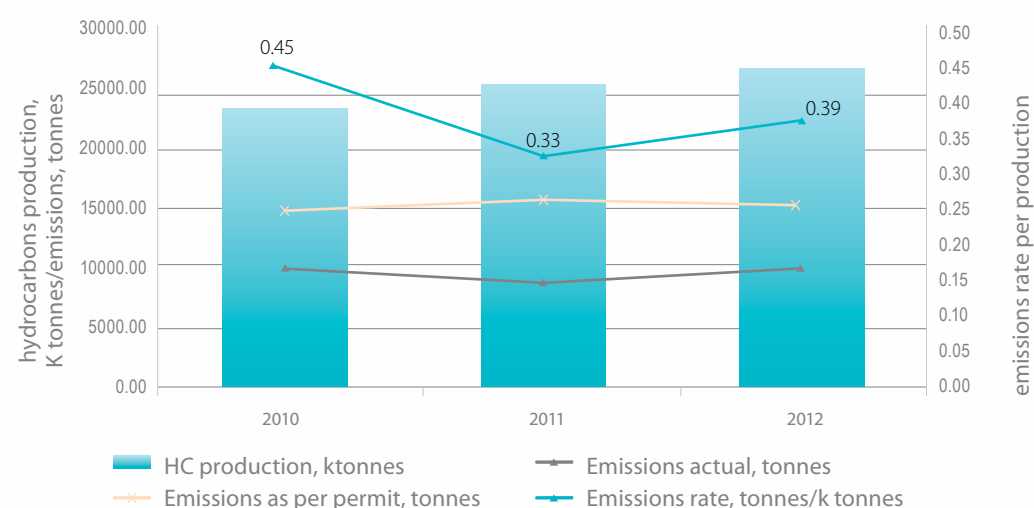
Therefore, we believe it is more reasonable to compare the volumes of oil and gas flaring in 2012 and 2010. In 2012, the gas flaring volumes increased by 17 per cent, compared to 2010, due to an increase of well activities as a result of two well treatments after multiphase fracture.

It should be noted that the gross increase of gas flaring volumes did not result in a concurrent increase of specific gas flaring, in comparison with 2010.

In 2010, KPO completed a feasibility study of the project on the re-injection of liquid hydrocarbons to the reservoir when cleaning wells.

This project was implemented in the second quarter of 2012. Following the implementation of this initiative within six months the volume of liquid hydrocarbons flared decreased by almost 7,000 tonnes of oil whilst the scheduled reduction was 2,800 tonnes per year.

Graph 1. Volumes of hydrocarbon production and air pollutant emissions, 2010-2012



CARING ABOUT THE ENVIRONMENT

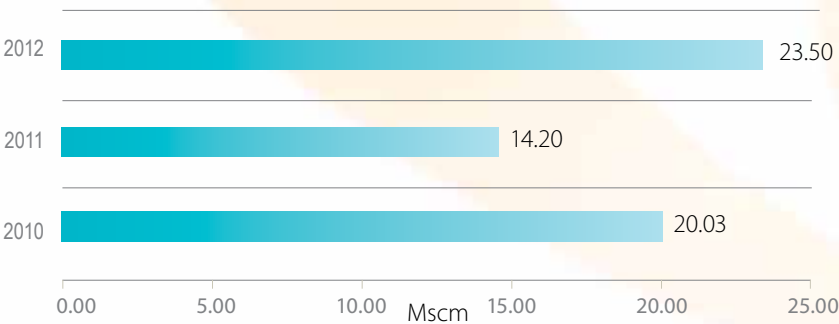
GAS UTILISATION IN 2012

In 2012, KPO achieved the world-class gas utilisation rate of 99.87 per cent (99.92 per cent in 2011, 99.87 per cent in 2010), whilst the regulatory target approved by the Authorities within the Gas Utilisation Program is 99.75 per cent.

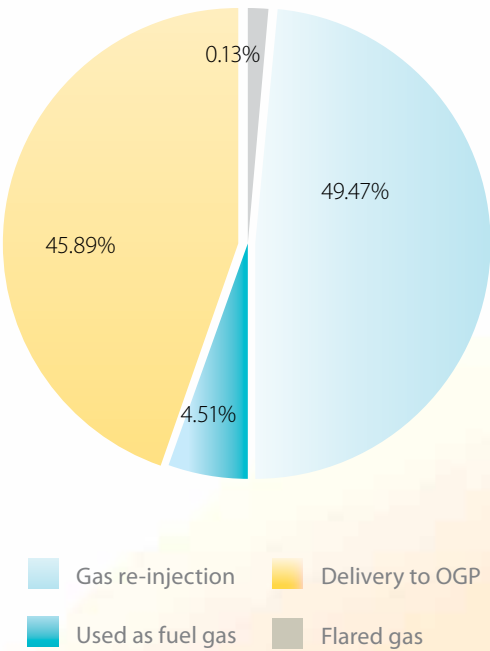
In 2012 KPO produced over 17 billion cubic meters (bcm) of gas, of which:

- 8.039 bcm (45.89 per cent) was sold to the Orenburg gas processing plant;
- 8.666 bcm (49.47 per cent) was re-injected into the reservoir using innovative high-pressure sour gas injection technology;
- 0.790 bcm (4.51 per cent) was utilised as fuel gas providing energy for the process units and for the local communities;
- Only 0.235 bcm (0.13 per cent) of gas was flared making Karachaganak the leading oil and gas condensate field in Kazakhstan for gas utilisation.

Graph 2. Volumes of gas flaring



Graph 3. Gas utilization and flaring in 2012



At the Karachaganak Processing Complex

CARING ABOUT THE ENVIRONMENT



By the fixed Environmental Monitoring Station

AIR QUALITY MONITORING

A well-defined production environment monitoring system is established in the Company, and includes a wide range of observations, such as: environment components condition covering surface water basins, underground waters, and soil, as well as daily monitoring of atmospheric air quality at the sanitary protection zone boundary and adjacent communities, and emission monitoring covering production emissions, waste waters, and industrial waste.

KPO conducts monitoring in accordance with the Production Environmental Control (PEC) Programme, which includes the following three functions: operational, emission and impact monitoring.

Operational monitoring (or monitoring of production process compliance) is the observation of process parameters to confirm the fact that facilities operate in the process mode avoiding excessive emissions and contaminants discharge in the course of operation.

Emission monitoring – monitoring of production emission rate and quality from pollution sources, which is done to investigate compliance of production emissions quality and discharges with the established standards.

Impact monitoring – monitoring of environment components condition at the SPZ boundary and other detected areas with possible negative impact, when users of natural resources perform economic activity.

Impact monitoring consists of:

- Atmospheric air monitoring – obtaining information on contaminants content in the atmospheric air at the SPZ boundary, in the air of communities adjacent to the KOGCF, across KPO facilities within the Field area; at pumping stations in Bolshoi Chagan and the Atyrau Terminal and valves along the KATS route, as well as prevention of emergencies or critical situations that are harmful or dangerous to the health of humans and other living organisms;
- 12 fixed automatic environment monitoring stations are installed across the area of the KOGCF (EMS 001-012), and all connected to an automatic environment monitoring system;
- Soil monitoring – obtaining analytical information on soil condition across the Field area, adjacent to the KOGCF communities and soil close to the KATS route when in operation for the detection of all possible hazardous areas along condensate pipeline route;
- Underground water monitoring – obtaining accurate information on ground water condition to assess the impact from possible contaminants sources and evaluate the efficiency of measures, performed by KPO;
- Surface water basins monitoring - obtaining information on the qualitative composition of surface water and impact from Field activity and export condensate pipeline.

The PEC Programme, which has been conducted from 1998 to 2012, has identified no significant negative impact and no accumulation of contaminants in the environment.

GHG REDUCTION STRATEGY

In accordance with the RoK Legislative requirements in the area of Environment Protection and requirements of Parent Companies, which, in their turn, are based on provisions of the UN FCCC and the Kyoto Protocol 'Protection of global climate for present and future generations of mankind', KPO carries out the recording of greenhouse gases emissions that are dissipated into the atmosphere during production activities at the KOGCF.

Greenhouse gases (GHG) with direct greenhouse effect (CO_2 - carbon dioxide, CH_4 – methane and N_2O - nitrous oxide) are generated at all stages of the technological cycle during the operation of the KOGCF industrial facilities. Main technological processes causing generation of these gases are firing of fuel for production of various types of energy: electrical, heat and steam.

Every year KPO carries out monitoring of GHG emissions by using national methodological guidelines on the calculation of GHG gases emissions into the atmosphere from oil and gas sector companies, and the IPCC international guidelines along with procedures from the American Oil Institute API Compendium.

As per the submitted procedure, GHG emissions are not measured but calculated on the basis of data on production outcomes and fuel consumption, using emissions factors or conversion coefficients based on data of fuel component composition.

The total volume of GHG emissions for 2012 amounted to 1,750,041 tonnes of emissions in CO_2 equivalent. The proportion of each gas with direct greenhouse effect totaled 1,599,074 tonnes of CO_2e (91.3 per cent); CH_4 – 142,781 tonnes in CO_2e (8.2 per cent); N_2O – 8,186 tonnes in CO_2e (0.5 per cent).

The main input (up to 61 per cent) to general GHG emissions comes from three main KOGCF sources: gas turbine power stations, gas turbines of reinjection compressors and HP steam generators.

A growth of GHG emissions compared to the previous years, that is presented in dynamics of GHG emissions (taking into account the recalculations), is directly associated with growth and development of the KOGCF production. Particularly, the commissioning of the 4th condensate stabilization train at the KPC in the second half of 2011 resulted in the growth of fuel consumption for the production of additional electric power, steam and volume of gas re-injected and as a consequence – it resulted in growth of GHG emissions.

The correlation of GHG emissions to hydrocarbons production is demonstrated by specific GHG emissions. For example, within the period 2010-2012, specific GHG emissions per unit of production were preserved at the same level. The slight increase in indicator by one per cent in comparison with 2011 is explained by an increase of well operations scope.

CARING ABOUT THE ENVIRONMENT

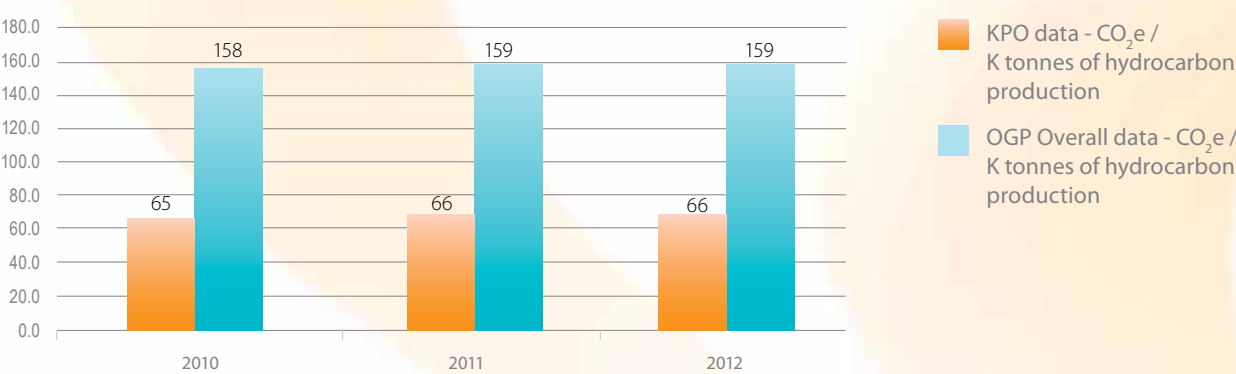
Table 3. Dynamic of GHG emissions generated in the course of KPO production activities

General volume of greenhouse gases (in tonnes CO ₂ equivalent)					
From firing of fuel at flares and incinerators	From firing of fuel in stationary sources	From usage of fuel for other purposes	Total volume of GHG emissions in 2012	Total volume of GHG emissions in 2011	Total volume of GHG emissions in 2010
162,057	1,444,339	143,645	1,750,041	2,263,554 (1,670,764)	2,115,680 (1,532,541)

Notes:

- 1. Data on GHG emissions volumes are taken from inventory passports submitted to West Kazakhstan Regional Department of Ecology and the RoK Ministry of Environment Protection. Data for previous years are restated from the Sustainability Report 2011, where the data was based on the methodology applied by the Parent Companies.
- 2. Data on GHG emissions volumes for 2012 are taken from the inventory report which will be submitted to the RoK Ministry of Environment Protection by the 1st of April according to the new RoK legislation. The reason of the substantial GHG volume reduction in 2012 is due to the change of the fugitive CH₄ emissions calculation methodology provoked by the new RoK legislation requirements.
- 3. The figures in the brackets show the values recalculated by the same 2012 methodology to enable them to be comparable to the 2012 figures.

Graph 4. GHG (CO₂e)/K tonnes of hydrocarbon production



Notes:

- 1. Data for this Report taken from inventory passports submitted to the West Kazakhstan Regional Department of Ecology and the RoK Ministry of Environment Protection, was recalculated in 2012 according to the new methodology. Data for previous years are restated from the Sustainability Report 2011, where the data was based on the methodology applied by the Parent Companies.
- 2. Data on GHG emissions volume for 2012 are taken from the inventory report which will be submitted to the RoK Ministry of Environment Protection by the 1st of April according to the new RoK legislation. The reason of the substantial GHG volume reduction in 2012 is due to the change in the fugitive CH₄ emissions calculation methodology determined by the new RoK legislation requirements.

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Analysis of the KPO index shows that specific GHG emissions correspond with the level of European companies and are 45-57 per cent lower than the global average for the oil production industry. This fact once more proves that KPO successfully achieves the targets on GHG emissions reduction established in its strategy.

Indirect GHG emissions at the KOGCF generated as a result of power consumption from the regional WKO power system accounts for an insignificant part (0.004 per cent) of general KPO GHG emissions, as the Company owns the Gas-turbine Power Station, which provides electrical power for the whole complex of production facilities in the Field and nearby communities.

In 2008 the Company developed and introduced its GHG Management Strategy for 2008-2012, thus having assumed its voluntary commitment on reduction of GHG emissions. This Strategy was developed with the goal to achieve cumulative decrease of CO₂ emissions by one million tonnes over 5 years.

To reach the assumed obligations KPO has defined annual key indicators on the reduction of GHG emissions. For the year of 2012 the target was to reduce GHG emission by 30,000 tonnes owing to the realization of projects listed in the table below. The set objective was exceeded by 69 per cent.

KPO exceeded its strategic GHG reduction goal by 29 per cent, cumulatively reducing its emissions by 1.29 million tonnes of CO₂e over 2008-2012. This became possible thanks to:

- Personal involvement and commitment of the Company's management;
- Planning of annual objective indicators on the reduction of GHG emissions;
- Realization of the top priority projects targeted at the improvement of operation effectiveness with minor costs but allowing for significant reduction GHG emissions;
- Implementation of best available technical methods of production operation activities at the KOGCF facilities and process optimization in well operations.

Table 4. Comparative analysis on specific GHG emissions per hydrocarbon production unit

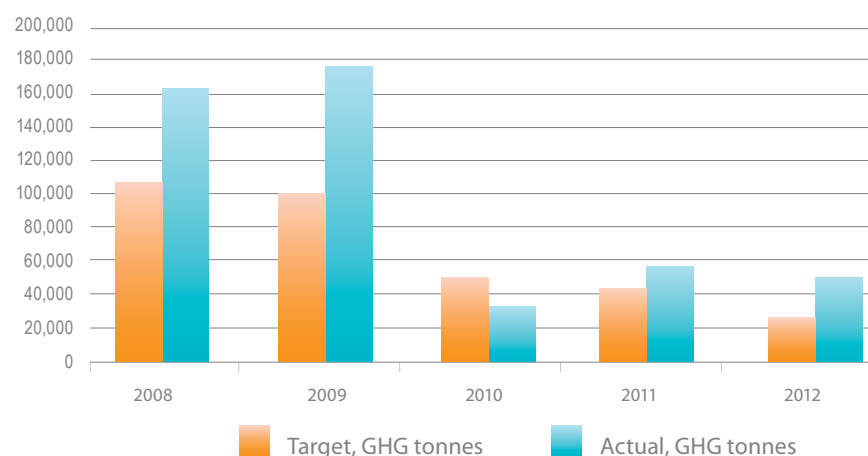
Environment indicator categories	KPO Data			OGP Data / Europe	OGP Data / Overall
	2010	2011	2012	2011	2011
CO ₂ +CH ₄ (CO ₂ e)					
tonnes per K tonnes of hydrocarbon production	65	66	66	84	159
CO ₂					
tonnes per K tonnes of hydrocarbon production	60	59	59	75	133

Note: For comparative analysis, the data of International Association of Oil & Gas Exporters along with the Report "Ecological indicators of oil production industry - data for the year of 2011" was used.

Table 5. Projects aimed at GHG emission reduction in 2012

Projects	Target value in tonnes	Actual achievement of the objective in tonnes
Proceed with the usage of the Expro system on the return of fluid during wellbore testing	16,575	27,083
Reduction of steam-flow consumption fed into the KPC flare system	405	405
Carry out repair works of leaking valves at the KPC and reduce speed of gas flaring	12,812	23,329

Graph 5. Implementation of GHG reduction strategy



CARING ABOUT THE ENVIRONMENT



At the ceremony of HSE Award for Climate Change - GHG Reduction Programme

The results achieved by the Company were recognised at the annual awarding ceremony of BG Group Chairman Awards held in May 2012 in the United Kingdom, where KPO received the highest award in the Environmental Protection category "Climate Changing – Program on Reduction of Greenhouse Gases".

The main objective of this competition is recognition of excellent indicators in occupational, industrial and general safety, environmental protection and corporate responsibility of all BG Company's sub-divisional companies around the world.

ENERGY CONSUMPTION

In 2012 there has been an increase in the energy consumption at the Karachaganak Field facilities. The growing dynamics is explained by the introduction into service of additional capacities (GPI at the Eco Centre) and expansion of the existing 4th Stabilisation Train at the Karachaganak

Primary energy consumption

Primary energy consumption, 10 ¹⁵ J	2010	2011	2012
From non-renewable sources, primarily natural gas	5.47	6.24	6.37

Processing Complex.

In the meantime, KPO has decreased the level of energy purchased by generating own primary energy for its operational units. The table below shows the decrease in the volume of energy purchased by units within the Field in the past three years.

Purchase of electricity, in MWh	2010	2011	2012
KATS (Atyrau, Block Valve Station 1-35)	1,802	1,779	1,959
Bolshoi Chagan	27	62	0
Field operating units (including KPC, Unit 2, Unit 3, Eco Centre, Gathering system and KOTS)	9,336	5,317	179

WATER

The protection and rational use of water resources is a critical and high-priority task set for all humanity as water is not just industrial feedstock but, more importantly, is a primary source of life. KPO strives to optimize its consumption of fresh water taking measures on conservation of water resources and recycling of treated water where possible.

To achieve these goals the Company does not discharge treated waste water into surface water bodies but uses specialized constructions (holding ponds) for treated domestic and industrial waste waters. These facilities do not only exclude the leakage of contaminants into soil and underground waters but provide treated water for further use on technical needs, thereby reducing fresh water intake. The total volume of treated domestic water discharge in 2012 was 93,772 m³.

The associated water extracted along with hydrocarbons and process water is treated and injected into deep subsurface horizons, in 2012 the volume of associated water was 265,118 m³. The total volume of all discharged waters was 368,292 m³.

Due to the reliable isolation of horizons and the perfect ground conditions available for the preparation and injection of waste water the migration of wastewater into surface water-bearing horizons is excluded. Waste water injection is a worldwide practice that is aimed at solving the problem of the disposal of highly mineralized wastewater without the generation of saliferous wastes on the surface during their treatment.

The ongoing monitoring is conducted to assess the industrial impact and take timely measures for prevention, reduction and elimination of its impact on surface and subsurface water quality. Water flows and potential migration of contaminants are tracked and documented; and inspections for compliance with effective sanitary and hygiene standards are performed.

In 2012 the internal procedure on water consumption and water discharging at KPO facilities was updated, and enabled KPO to effectively manage the issues related to the rational use water resources in the Field, and also to comply with the set rules and water consumption regime.

In 2012, water discharge volume totalled 368,000 m³ at the rate of 904,000 m³. The total amount of pollutants discharged was 4,922 tonnes, vs the rate of 17,979 tonnes; 436 tonnes was discharged which exceeded standards.

The main types of standards exceeded related to higher concentration of soluble salts in the wastewater pumped into aquifers. Higher concentration of nitrogen (in the form of nitrogen ammonium, nitrite or nitrate ions) occurred in the water discharged into the holding ponds. The exceedance of oil products and suspended solids in KPO wastewater wasn't observed. Holding pond water was used for irrigation as it allowed higher concentration of nitrogen compounds than it was set by standards.

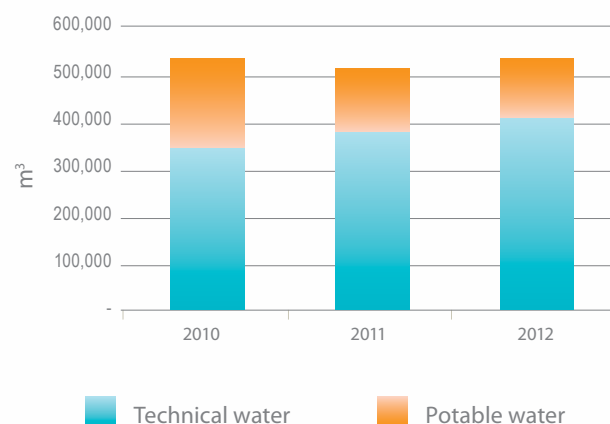
CARING ABOUT THE ENVIRONMENT

Table 6. Total volume of water discharge by category of discharged waters and destination, m³

Destination	2010	2011	2012
Discharge of treated domestic wastewater, incl.	130,647	112,909	93,772
Into seasonal regulation pond of Unit-3	11,106	8,868	7,051
Into holding pond No.1 AGK	78,514	36,435	26,992
Into holding pond No.2 AGK	38,945	65,412	57,498
Into evaporation pond OPS Bolshoy Chagan	1,180	1,339	1,283
Into evaporation pond OPS Atyrau Terminal	902	855	948
Injection of technical and associated landfill into underground waste water storage landfill incl.	243,524	266,250	265,118
Technical and associated water from Unit-3	11,097	10,348	10,115
Technical and associated water from Unit-2	3,152	2,564	3,610
Technical and associated water from KPC	229,275	253,338	251,393
Surface discharge of storm runoffs, incl.	5,780	18,014	9,402
From irrigational Laguna Unit-2	-	3,600	5,138
From irrigational Laguna KPC	-	11,332	4,040
On OPS Bolshoi Chagan	459	440	224
Eco Centre	5,321	2,420	
Total water discharge	136,427	397,173	368,292

Note: Injection of technical and associated water into the underground waste water storage landfill was classified as waste management

Water consumption



TECHNICAL WATER

The major source of water supply for operational needs in the Karachaganak field is pond #1 of technical water at Konchubay gully. The 2012 water intake totalled 414,008 m³, which is 72 per cent of the limit of 578,904 m³ established by the RoK Special Water Use Permit.

The water intake for technical purposes at Bolshoi Chagan and the Atyrau Terminal in 2012 totalled 2,429 m³, which is 38 per cent higher than in 2011.

In order to reduce fresh water intake in 2012, KPO re-used 98 778 m³ of treated waste waters for the following technical needs:

- Preparation of drilling mud for well operations – 19,190 m³;
- Watering of greenery – 68,698 m³;
- Dust suppression – 10,890 m³

In order to improve the wastewater treatment quality in 2012 KPO had continued the works on Phase II of the Field wide Wastewater Upgrade Project. The State expert review conclusions have been obtained for the detailed design projects; and the equipment required to implement the design solutions is being procured.

POTABLE WATER

The source of potable water supply in the Karachaganak field is the Zharsuat intake. The potable water from this source is used only for domestic needs of the field facilities. The volume of KPO's water use for domestic needs for 2012 has totalled 117,843 m³; which is 11 per cent less compared to 2011. Such reduction has become possible thanks to the Company's efforts to efficient water use including the following steps:

- Water use rationalization;
- Monitoring and complying with the limits and water use schedules established and approved by the Republic of Kazakhstan Regulatory Authorities;
- Maintenance of water facilities and technical devices in operating condition, scheduled maintenance of water line and fittings with the aim to prevent loss of water through the leaks;
- Keeping records and timely reporting on the use of water resources.

2,247 m³ of water was consumed in 2012 for the domestic needs of the export pipeline terminals Bolshoi Chagan and Atyrau, which is 2 per cent higher than in 2011.

Research works on the analysis of biological after-treatment of waste water from the KOGCF using Eichhornia crassipes (Water Hyacinth) commenced in 2012. Further activities will be developed based on the results of the research and conclusions by regulatory bodies.

CARING ABOUT THE ENVIRONMENT

WASTE MANAGEMENT

The main KPO principles, objectives and targets with regard to Waste Management are set in the Corporate Waste Management Strategy.

The Waste Management Procedure was developed and implemented for safe waste management and reduction of existing and potential hazards of waste to people and environment. The procedure defines roles and responsibilities of the personnel involved in waste management, accounting and reporting procedures and outlines the requirements for waste inventories, passport issue, collection, storage and transportation. In accordance with the waste handling methods set by the Waste Limits Project, the procedure covers waste movement flowcharts for wastes to be disposed and treated at Eco Centre facilities and wastes to be handed over to contractor for further treatment, removal and disposal.

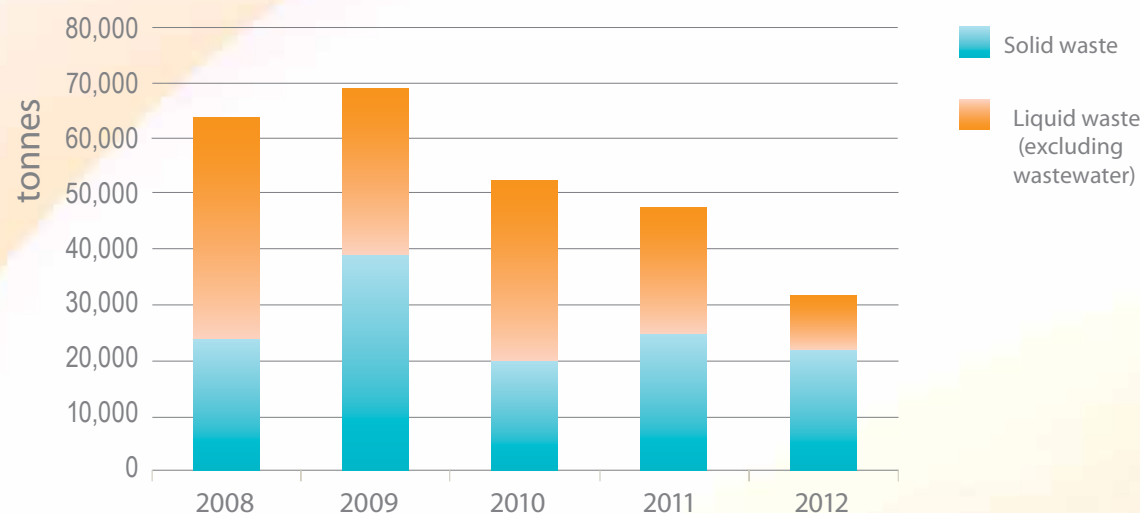
The total amount of wastes generated at KPO facilities in 2012 decreased compared to 2011 and amounted to 31,197 tonnes.

Under implementation of measures to minimize the quantity of wastes and to reduce their negative impact on the environment, KPO has built a modern Eco Centre for processing and disposal of industrial and municipal waste. The Eco Centre meets international standards for recycling and safe environmental disposal/burial of drilling fluids and cuttings. Efficient waste management allowed to reduce the total waste in KPO by 37 per cent; an increasing treatment of wastes by 57 per cent by reusing waste plastics, recovery and recycling of mineral oils, waste paper and, scrap metal, etc.

The Eco Centre consists of the following units:

- The thermo-mechanical cuttings cleaning (TCC) facility which provides safe and efficient treatment of oil based mud cuttings;
- The liquid mud plant (LMP), the processing facility for mixing and treating drilling oil

Quantity of generated waste



based mud (OBM);

- The liquid treatment plant (LTP), which treats hydrocarbon contaminated water, recycles brines to be re-used for work-over operations and processes water-based mud used in top hole drilling operations; provides treatment and delivery of water to KPC wastewater collector to be injected into dedicated disposal wells for waste water;
- The rotary kiln incinerator (RKI), which is used to process solid wastes and oil-contaminated materials other than drilling cuttings;
- A new solid waste burial to Landfill;
- The general purpose incinerator (GPI) commissioned in 2012 which will allow reducing the volume of domestic waste subject to burial at Landfill by 95 per cent; and
- The waste segregation facility expected to be completed by the middle of 2013.

At present, KPO is able to recover and reuse expensive base oil which forms 65 percent of the oil-based mud, and to separate base oil and water from cuttings at TCC, thus reducing the hazardous characteristics and the volume

of solid waste disposed at solid waste burial landfill. In 2012, 12,726 tonnes of spent oil-based drill cuttings and 1,134 tonnes of base oil were separated to be used for preparation of new oil based drilling mud.

7,295 tonnes of liquid waste from wells operations were treated at the Liquid Treatment Plant during 2012.

120 tonnes of wastes were burned in the general purpose incinerator (GPI) since it was commissioned.

The new Waste Landfill was constructed adjacent to the Eco-Centre for the burial of solid industrial wastes. The landfill is designed in compliance with safety and environmental requirements and standards and currently contains 12 cells - seven cells were completed and commissioned in 2011 and five in 2012.

The Solid Waste and Spent Drilling fluids Storage Site ("old polygon") is located in the southern part of the Field circa 10 km from the Eco Centre. Wastes currently stored in the four cells of the old polygon will step-by-step be transferred to the new Landfill. 11,564 tonnes of solid wastes were removed from the old site for treatment and burial in the new Landfill in 2012.

The remaining amount of accumulated wastes will be transferred upon the results of waste

CARING ABOUT THE ENVIRONMENT



By the control panel of the new General Purpose Incinerator

laboratory analysis and studies to comply with the related requirements for their burial in the new Landfill. Then the old polygon will be decommissioned and all remediation works will be done after the cells are emptied.

The waste segregation facility which is planned to be completed in 2013 will enable the reduction of the total amount of wastes sent to Landfill, reduction of incinerated waste and separation of the valuable components for recycling: paper, textile, plastic bottles, glass, polyethylene, ferrous and nonferrous metal. In 2012, 114.35

tonnes of waste were sent to the temporary waste segregation unit of the contractor AksaiGasService.

Scientific research in collaboration with the West Kazakhstan State University was completed on the use of carbonate drilling mud treated at TCC for road construction. The results of this work proved that the carbonate drilling mud can be used as primary material for the preparation of mineral fines used for asphalt-concrete mix. Within the scope of this work in 2012, trial asphaltting of an experimental part of a road

(146m x 6m x 0.05m) was performed using the asphalt-concrete mix containing 5 per cent of the mud under study which amounted to 10.1 tonnes of waste. The studies proved the possibility and environmental safety of the treated carbonate drilling mud usage for preparation of asphalt-concrete mix.

In future KPO plans to send this type of waste to road construction companies on a permanent basis.

CARING ABOUT THE ENVIRONMENT

Table 7 provides the details on generated hazardous and non-hazardous waste and handling methods applied by KPO. Methods of waste handling such as composting and injection into deep subsurface formations are not applied in the Company.



Table 7. Quantity of generated, treated, disposed and recycled waste, tonnes

Waste hazardous level	2012 Waste managed by KPO										2012 Waste transferred to the third party for further processing				Generated in 2012	Generated in 2011	Generated in 2010
	Incineration			Recycling				Reused without recycling	Disposed at the Landfill	Accumulated on site	Reused	Recycled	Incinerated	Disposed at municipal dump			
	Waste sent for incineration	of which		Waste sent for recycling	of which		Decontaminated										
Hazardous waste, generated during the reporting period	777	211	551	14,624	4,880	6,866	2,872	223	134	3,703	16	315	341	2,289	22,328	31,811	46,325
Non-hazardous waste, generated during the reporting period	3	3	0.03							281	0	111	91	8,384	8,869	17,588	6,272
Hazardous waste, accumulated on site in the previous years	2,934	417	2,449	5,400	481	4,914			8,370			97	5				
Non hazardous waste, accumulated on site in the previous years												0.5	0.3	200			

CARING ABOUT THE ENVIRONMENT

WASTE PAPER RECYCLING PROJECT

In December 2010, as part of the obligation to collect and recycle waste paper, KPO successfully launched a pilot project for the collection of segregated paper. Since then 39,994 kg of waste paper and cardboard were collected from several KPO office buildings. Thus, the volume of municipal solid wastes taken out to the Aksai city's landfill was reduced by over 39 tonnes. In 2012 segregated collection of paper was carried out in three offices of the Company. In 2013 KPO plans to involve all offices and facilities into this project implementation.

SPILLS

In 2012 three spill incidents occurred in the Karachaganak Field. The responsible KPO contractors cleaned up the spills, and the contaminated soil was properly utilised. The incidents were investigated to identify root causes and reported to the RoK authorities. Corrective and preventive actions were taken to avoid occurrence of such incidents in the future.

GRYPHON AREA REMEDIATION

Activities on biological remediation of the disturbed lands at the Gryphon area were completed in November 2011. In 2012, KPO handed over the recovered 49.1 hectares land of the Gryphon area to State ownership.

BIODIVERSITY AND ECOSYSTEMS

Conservation of biodiversity and ecosystems is an integral part of the concept for mankind's transition to sustainability principles.

Biodiversity conservation is the conservation of resources which are critical and beneficial at the local and national level, and also at the universal human level.

The main principle for the conservation of biological diversity is the conservation of

ecosystems and natural habitat, as well as maintenance and rehabilitation of viable population types within their natural habitat (Convention on Biological Diversity, Rio de Janeiro, June 5, 1992).

In 2012 KPO continued its activities for biodiversity conservation which started in 2010.

The territory of the Karachaganak Field cannot be qualified as a natural area of preferential protection; however, it is inhabited by a large number of flora and fauna species, including those listed in the Red Book of Kazakhstan.

In 2011 KPO developed the Biodiversity Conservation Action Plan. The main objective of the Plan is to conserve species and their habitat within the KOGCF in reconciliation with KPO activities and land used by other interested parties within the area. The Plan also covers conservation of remaining Steppe ecosystems and mitigation or compensation of the impact on biodiversity.

The Plan sets measures for the monitoring and keeping records on biodiversity and ecosystem services around the area of the KPO operational activities. In early 2012, the 2012-2013 Biodiversity Action Plan (BAP) was approved by the Western Kazakhstan Environmental Department of the Committee for Ecological Regulation and Control under the RoK Ministry of Environmental Protection.

According to the Plan the following actions had been implemented in 2012:

- Field studies on recording beaver species have been carried out across the KOGCF area. Beavers are classified as a sensitive animal species, associated with coastal ecosystems adjacent to the KOGCF. Based on the results, no correlations were observed between the quantity of species against 2008 year data and reduction in the number of species and KPO activity. Beavers continue to inhabit the areas, located close to the KPO facilities, where their inhabitation is not impaired and they are not disturbed. Reduction in the population of beavers is likely to be caused

by reduction in precipitation in the region;

- Work method statements have been developed for water protection zones and belts at the KOGCF area;
- A database of species inhabiting the KOGCF has been created;
- Ecosystems state review within the KOGCF and adjacent area to map the ecosystems for three different periods has been started.
- Vegetation monitoring within the area of the Karachaganak Field influence, satellite images review to identify changes in the ecosystems, mapping of the coastal ecosystems, recommendations on the biodiversity action plan are all scheduled for 2013.



PEOPLE ARE OUR ASSET

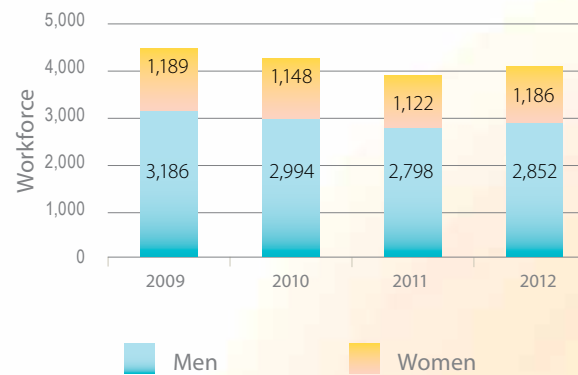
Developing and operating the Karachaganak Field requires thousands of dedicated and talented employees in a wide range of disciplines, from petroleum engineers and technicians to accountants and logistics specialists. Our people are the key to our success. We invest massively in the development of our national workforce using the international expertise of our partners in the venture, appropriate classroom training and renowned educational institutions.

Graph 1. KPO Workforce



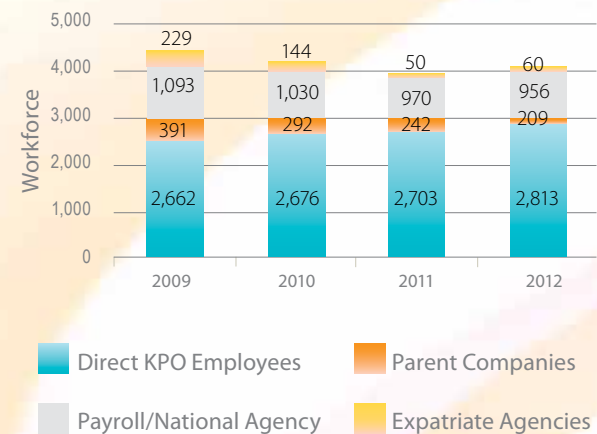
In 2012, 4,038 employees worked at KPO (including core organization and temporary projects), of which Kazakhstani nationals constituted 3,769 people, and expatriates – 269.

Graph 2. KPO Workforce by gender



In terms of gender split, 2,852 male and 1,186 female employees worked at KPO in 2012. The data on the gender split for the 2012 and previous years is shown above.

Graph 3. KPO workforce by contract type



Total workforce by employment contract split for 2012 and previous years is shown above.

Employees who have a fixed term of employment contract are regarded as temporary employees.

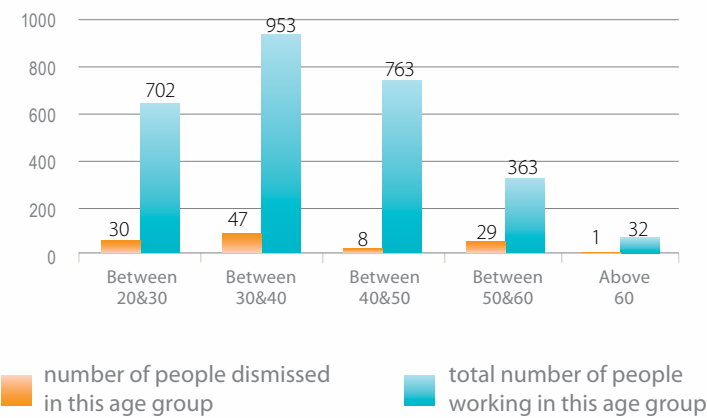
PEOPLE ARE OUR ASSET

The map below represents the KPO workforce by work location.



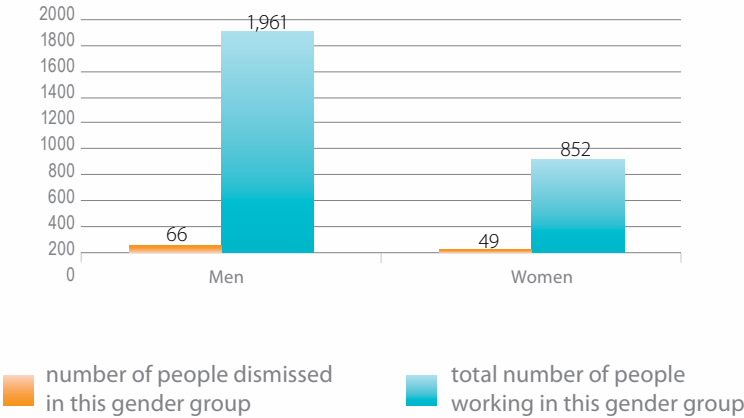
The total number of the KPO direct employees leaving employment during the reporting period broken down by age is shown in **Graph 4**. This chart includes both permanent contract and temporary contract employees.

Graph 4. KPO Turnover by age



The **Graph 5** shows the total number of employees leaving employment in 2012, broken down by gender.

Graph 5. KPO Turnover by gender



PEOPLE ARE OUR ASSET

TRAINING AND DEVELOPMENT

We apply individual approach to the needs of employees in training and development, offering custom development activities including the following:

- International qualifications;
- Language training, computer competence and business skills training
- Professional training;
- Mandatory HSE training.

This approach allows the company to ensure that:

- Employees meet the competency (skill, knowledge) requirements in order to do their jobs effectively;
- Employees are capable to take on larger roles with more responsibilities within the organisation, and supporting talented and motivated persons to fill critical positions.

Such an approach requires a continuous evaluation of development needs across the business, but it enables us to tailor development plans to the specific needs of an individual in a specific Company area, thus maximising results. The most widespread approach in the Company is the use of short- and long-term training courses aimed at providing employees with professional skills they need to do their job.

Another facet of training and development at KPO is the expansion of opportunities to attend internationally certified programmes. The KPO general strategy depends on the introduction of international practices and technologies. Employees not only need to possess the skills required to operate new equipment or work with new technologies, but also to acquire the advanced knowledge required by the industry at the international level. Besides production-related needs, programmes are also instrumental in personal development, staff motivation and retention.

In 2012, 346,873 hours of training were delivered, out of which 231,785 hours were provided to the Company employees. In average, the number of training hours per employee on certified programmes was 42.1 hours, on professional development - 27.9, on computer and business

skills training – 14.9 hours per employee, technical and HSE related training – 6.6 hours, and language training – 41.6 hours. In terms of average expenditure, this corresponds to USD 618 per attendant spent on training in 2012.

Out of the total number of training hours delivered in 2012, 113,929 hours of mandatory HSE training was provided to contracting companies' employees working in the Karachaganak Project.

Training provided to total number of employees in 2012 is broken down as follows:

- Management – 349 persons (64.5 hours per employee);
- Professional staff and supervisors – 1,773 employees (62.1 hours per employee);
- Technical staff – 1,064 employees (90.4 hours per employee);
- Support and clerical staff – 64 employees (41.6 hours per employee);

In 2012 KPO launched the online training for the "Life Savers" Programme. 11,137 employees were trained as part of the mandatory online training programme, including the contracting companies' staff.

In total, 45,594 courses were provided in 2012; 21,454 of them - to the employees of contracting companies.

COMPETENCY MANAGEMENT SYSTEM DEVELOPMENT

The robust Competency Management System provides real and lasting benefits to KPO, its employees and the Republic of Kazakhstan. These benefits include:

- Providing a workforce with the skills, knowledge, and experience to carry out their tasks safely, efficiently and consistently;
- Improvement of staff performance and motivation;
- Tools to support staff development within the organization;
- Reduction in severity and frequency of incidents and accidents;
- Improvement of production results.

In the nearest two years we plan to carry out nearly 22,600 assessments including HSE Life Savers across Production and Maintenance Departments' front line personnel.

To ensure effective use of its competency management system, KPO continuously trains its national personnel to be accredited with the internationally recognised OPITO Assessor Qualification. In 2012, 10 additional employees of the Emergency Response Department have been trained on the OPITO Approved Competence Assessor award Programme. 10 employees of the Production and Maintenance Department received Certificates of the OPITO Approved Competence Assessor Award, having completed the OPITO Approved Competence Verifier award Programme. The title of an OPITO Approved Competence Verifier is intended for organisations, which require a competence assessment as part of competency management programme.



KPO employees received International Diplomas in Management



KPO employees received International Certificates in Management

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On the parade dedicated to the Unity Day of the peoples of Kazakhstan

EMPLOYEE PERCEPTION SURVEY

In 2012 the Company conducted the perception survey for its national staff in order to gain some information on employees' opinion about the Company and their attitude to work at KPO.

The Company was keen to obtain information on the following topics:

- Staff motivation;
- Efficiency management;
- Training and Development;
- Compensation and Benefits;
- Code of Conduct and Compliance;
- Cultural Diversity;
- Health, Safety, Environment and Social Performance;
- Information Sources about the Company.

To ensure maximum participation, the survey was conducted both on-line and using the printed forms. The total number of employees participated in the survey constituted 2,210 people.

The results obtained allow making the following conclusions:

- Employees are aware of the Code of Conduct and its compliance;
- Key information sources in the company are the Intranet, e-mail and key messages from management;
- KPO has a reputation of a socially responsible Company;
- Employees highly evaluate the company attitude towards the HSE issues.

DEVELOPMENT OF THE NATIONAL PERSONNEL

Workforce nationalisation is a crucial building block in the creation of the KPO's economic legacy, maximising the number of local employment opportunities and investing in the workforce of Kazakhstan. We have met the targets set in the FPSA and continue to work towards new benchmarks for the next 10 years that will see a Kazakhstani management team steering the future course of Karachaganak.

The KPO nationalisation strategy is closely linked to the main strategy of the Company. In order to deliver on nationalisation targets, and at the

same time improving organisational capabilities particularly in the area of management, the strategy relies not just on the development of knowledge and technical skills, but on the overall management capabilities and experience of the individuals involved.

The scope of the Nationalization Program encompasses the entire core KPO organization. These are all functional areas with the exception of long-term and short-term projects. The rationale for exempting projects from the Nationalization Program is that each of them has a limited life-span and is not permanent in nature. Project staff, both expatriate and national, is considered temporary hired to perform a strictly defined scope of work within the framework of the development and completion of a project. The expectation is that upon completion of the project staff will be redeployed to other positions within the KPO organization where possible, or released back on to the job market.

The number of nationalised senior and middle management positions at the KPO core structure steadily grows. In fact, the number of national employees in Category 1 – Senior and Middle management - in 2010 was 247, in 2011 – 259, and in 2012 it reached 287 people.

The strategic approach of HR towards the nationalisation process is based on the effective planning and implementation of training and development process rather than on the mere replacement of expatriate personnel with Kazakhstani staff. This will in turn ensure that all KPO operations are carried out at the highest level and in accordance with international standards. This allows KPO to meet business objectives with the highest possible quality level.

In 2012, 10 additional senior and middle managers positions at KPO were nationalised. At the end of 2012, local employees filled all of the venture's skilled and clerical positions and 95 per cent of professional and supervisory roles, 69 per cent of managerial positions were filled by local employees.

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New targets set in the next Nationalisation Plan include:

Category	Description	2012	2018 Plan
1	Management	69%	70%
2	Professional staff and supervisors	95%	95%
3	Technical staff	100%	100%
4	Support and clerical staff	100%	100%

Graph 6 below shows the total number of expatriate workforce in core organisation following the new Nationalisation Programme.

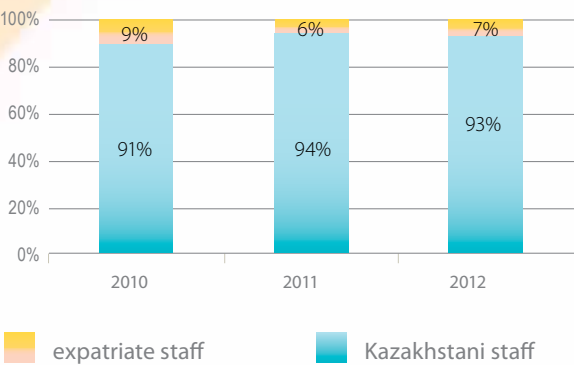
Graph 6. Number of expatriates in 2010-2012



The expatriate personnel are attracted to share best international practice and knowledge in different spheres with national employees. New company initiatives aimed at the future growth required involving expatriate specialists with specific skills in engineering and design, and international experience and knowledge.

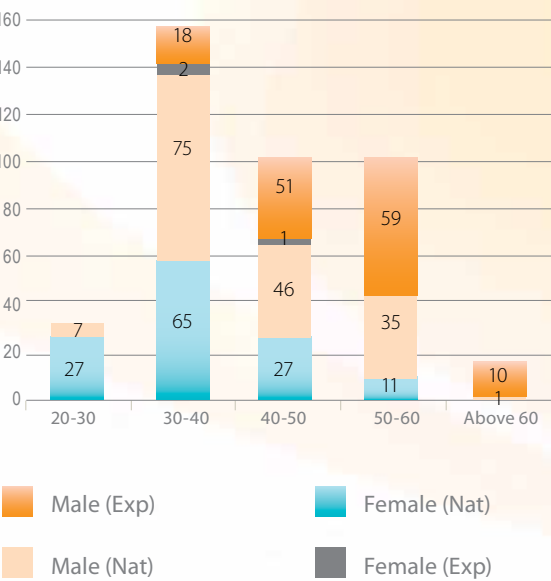
Graph 7 provides data on national and expatriate staff content in core organisation.

Graph 7. Content of national and expatriate personnel in 2010-2012



The overall number of senior and middle managers in whole KPO structure including core organization and temporary projects, expatriates and nationals, split by age and gender is reflected in Graph 8.

Graph 8. KPO National and Expatriate Managers by age and gender



EMPLOYEE RELATIONS

At KPO the rights of workers to associate and collectively negotiate working conditions are fully respected. Employees working in KPO are represented by two Trade Unions working under the Collective Agreements signed between KPO and the Trade Unions. The Collective Agreements provide a framework under which issues addressed by employees and Trade Unions are discussed.

The Collective Agreements are applied to all direct KPO employees irrespective of their membership in the Trade Unions. Terms and conditions of the Collective Agreements are reviewed regularly, which in practice is not less than every two years. In 2012 the Collective Agreements were reviewed and updated providing additional benefits for KPO employees (see below).

COMPENSATIONS AND BENEFITS

During 2012 KPO has continued the compensation activities aimed at improvement of recruitment, retention and motivation of its national staff.

KPO reviews the salaries of its personnel on an annual basis. In 2012, the process of salary review included the following:

- 10 per cent Cost-of-living increase applied as of January, 2012;
- Individual upgrades and salary increases;
- Annual bonus on employees performance;
- Market based pay adjustment of key technical staff in core business departments.

Additional bonus dedicated to the 15th anniversary of the signature of the FPSA in the amount of 100 per cent of the monthly base salary was paid in November.

Fringe benefits are an important part of the employment package and consist of financial and non-financial elements. The benefits provided in 2012 include the following:

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Financial benefits:

- Year-end bonus (100 per cent of base salary);
- One-time payment for health recovery (100 per cent of base salary);
- Bonus on the RoK Oil and Gas Worker's Day (100 per cent of base salary);
- Cash benefit for a child birth;
- Financial aid to deceased employee's family (12 months base salary and a material aid for the funerals);
- Financial aid in case of death of employee's family member;
- Financial aid in case of death of a KPO pensioner;
- Social help to KPO pensioners.
- Monetary funds for the Social Housing Assistance Programme to employees as per the Company policy.

The Collective Agreements signed in 2012 include the following additional benefits:

Cash benefit for sanatorium and resort treatment;

- Bonus on anniversary year of the FPSA signing (100 per cent of base salary) paid in a month of November every five years;
- A salary advance for social purposes to the Company employees not more than 4 (four) monthly rate salaries as per the Company policy;
- A loyalty allowance for the KPO seniority on a monthly basis.

Non-financial benefits:

- Medical insurance for employees and their family members;
- Educational grants for the KPO employees;
- Transport to work and back, free meals for employees who work in the field.

As per the Collective Agreement, the notice period given by Employer to the Trade Union in

case of significant organisational changes is two months prior to such changes.

The Collective Agreement also covers the following health and safety topics:

- Provision to employees of free personal protective equipment;
- HSE measures at work places and insurance against accidents at work places and against occupational diseases;
- Training of the personnel so that they properly understand and take appropriate measures with regard to HSE issues;
- Provision of sufficient and adequate means of first aid at all active oil and gas facilities;
- A regular medical examination of employees as stipulated by the legislation or safety procedures.

In 2012 KPO re-launched its Program on Voluntary Dissolution of Employment Relationship with provision of benefits for male employees who reached the age of 58 years and female employees who reached 53 years. This programme was effective until the 31st December 2012.

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

Employees hired to KPO through Agencies are covered by Collective Agreements of such Agencies. Specific benefits to be provided, including the budget, are agreed between KPO and Agencies.

KPO SCHOLARSHIP PROGRAMME

KPO has been providing scholarships to our employees and their children as a means of supporting their desire to advance education since 2002.

In 2012, 19 employees and 49 children of employees received scholarships, for a total of USD 238,000. Since the start of this programme in 2002, 132 employees and 305 children have received scholarships totalling USD 1,296,976.



At the meeting of the KPO Management and Trade Unions representatives regarding the revision of the Collective Agreement

DEVELOPING THE REGIONAL ECONOMY

Maximising the value of the Karachaganak Field to Kazakhstan means more than generating revenues and taxes through oil and gas production – it means forming long term, durable partnerships for economic development.

LOCAL CONTENT LEGISLATION AND REPORTING

Since the start of the Karachaganak Field development, KPO took a proactive approach on Local Content Development aimed at import substitution and increase the volume of local goods, works and services in total scope of goods, works and services purchased by international investors to run their businesses in Kazakhstan.

Acknowledging the requirements of the approved national legislation on Local Content, in 2010 KPO has introduced the unified calculation methodology of local content in its procurement system and established the regular quarterly reporting process on local content to the Ministry of Oil & Gas.

To maintain Local Content development and to demonstrate its transparent procurement practices, in 2012 KPO developed the annual, medium and long-term Plans for purchase of goods, services and works and posted them on the KPO website. This information helps the local businesses to develop their own strategies meeting the highest needs and requirements of the biggest Employer in the region. Moreover, such approach provides a good opportunity for local enterprises to better prepare for future cooperation with international companies.

SUPPORTING KAZAKHSTANI BUSINESSES

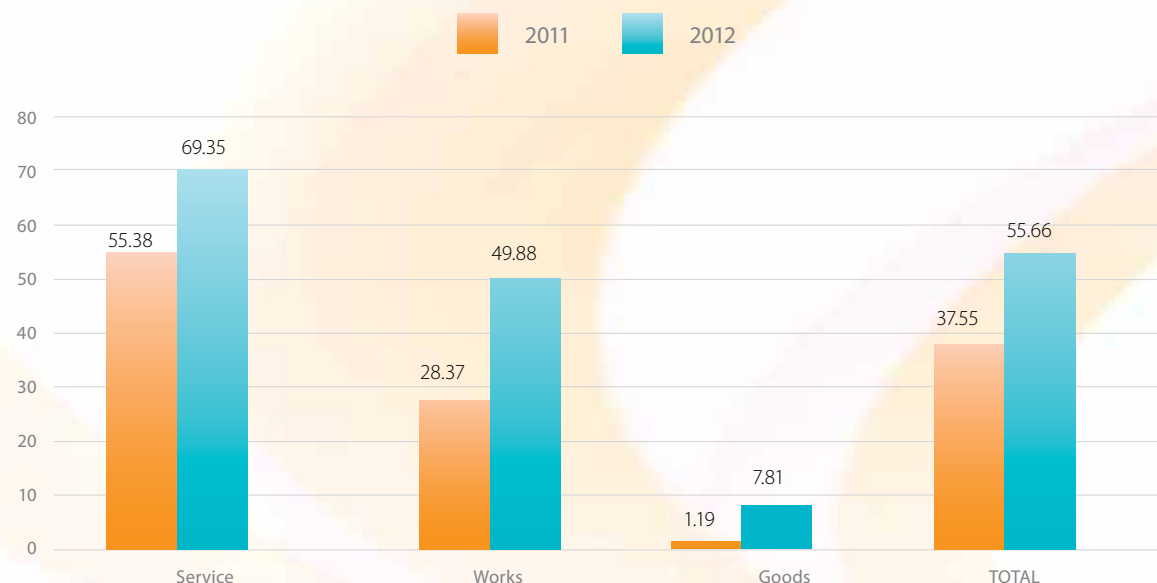
KPO is one of the first companies in Kazakhstan which has successfully introduced the Local Content Development Programme. Since the time of implementation of this programme in 2001, some 3,000 local suppliers have been registered in its database.

KPO committed to build the capacity of local businesses and maximise local content at further

stages of the Karachaganak development. This strategy applies to all aspects of the KPO activities.

In 2012, the Kazakh Content in the Karachaganak project made up to 56 per cent (USD 335 million as shown below).

Comparative summary of Local Content statistics in 2011 and 2012 (in %)



DEVELOPING THE REGIONAL ECONOMY

KPO seeks making a contribution to continuous development of the national market of goods and services, particularly in the Oil & Gas Industry. This approach facilitates the growth of domestic investments and develops competencies of local companies. To this end, the Company actively participates in the development of local suppliers and takes initiatives to facilitate localisation of spare parts and equipment production required for the Karachaganak Field operations. Such initiatives promote cooperation of western and national suppliers and provide favourable conditions for development of local companies and an effective “know-how” transfer to the national industry. It is important for KPO to maintain continuous development of local companies, building their capacity and competencies to ensure their conformity to international standards applied in the Oil&Gas industry.

One of such initiatives is the localisation of spare parts production based in the Western Kazakhstan Oblast. This project is aimed at development of local manufacturing of goods and materials demanded on a long-term basis in the oil and gas industry.

The project was designed taking into account the results of the KPO's needs review for goods and services and the national market research. The initial stages of the project implementation have defined the local capability and potential of the local manufacturers for their further development. The objective is to produce a strategic plan for development of local targeted commodity manufacturing through phased execution.

Another project determined to enhance the economic development of the region is the Aksai Industrial Park (AIP) opened in June 2012. The Aksai Industrial Park is the pilot project implemented by private companies in the industrial area of the Aksai town as part of Local Content development initiatives to ensure an effective “know-how” transfer from international first-tier companies to Kazakhstani enterprises. The purpose of this project is to provide all necessary conditions and support to international companies keen to develop partnerships with Kazakhstani enterprises to

develop their own complex of facilities.

This is a high technology Centre integrated into the socio-economic infrastructure of the West Kazakhstan Oblast and located in close proximity to major international companies, like Karachaganak, Tengiz and Kashagan. It provides direct communication opportunity to local contracting companies and their western partners.

The AIP invests funds into training and development of its employees, both in Kazakhstan and abroad. The AIP's local staff is provided with training at production facilities and headquarters of the partner companies in the UAE, Italy, Sweden, Germany, UK on a regular basis.

The issues of effective cooperation with domestic market are equally important for all the RoK enterprises in the Oil & Gas Industry. The biggest companies of the industry cooperate in various aspects to ensure maximum possible local content. One of the most successful formats of such cooperation is a forum with the involvement of local companies ensuring further development of goods' and services' market required by the industry, as well as attracting investments and the 'know-how' transfer.

In September, 2012, the JSC NC KazMunaiGas, and three major oil and gas operators working in Kazakhstan, Karachaganak Petroleum Operating B.V., North Caspian Operating Company B.V. and Tengizchevroil LLP organized a three-day Forum in Aktau under the headline “Creation of New Production facilities in the Western Regions of Kazakhstan”. Over 500 delegates from 36 countries, including Italy, UK, Germany, France, China and Russia took part in the Forum.

The main purpose of the Forum was to attract international companies to investment of new production facilities and creation of jobs in the Western Regions of Kazakhstan.

A number of documents, such as Memoranda and Agreements, were signed following the Forum which lays the foundation for cooperation and creation of joint enterprises. This also includes signing of the Aktau Declaration on Joint Measures between KMG and the major companies – TCO, NCOC and KPO.

SUPPLY OF ENERGY RESOURCES TO THE WEST KAZAKHSTAN OBLAST

As was mentioned in our reports for previous years, part of gas extracted at Karachaganak and electric power produced by KPO are delivered to the local market to ensure reliable power supply to the regional community.

Gas supply is also required for generation of additional amount of electric power at the KPO Gas Turbine Power Station (GTPS) for export to the West Kazakhstan Oblast (WKO) community.

Under the FPSA terms and conditions, it was agreed that initial power export for the regional community should be 20MW. Then, following discussions between the JOC and the WKO Akimat in 2005, KPO built and commissioned the fourth generator at the KPC GTPS which resulted in the gradual increase of power export to the regional grid up to 45-48 MW in subsequent years.

Currently, KPO generates and exports power to the two power providers for subsequent supply to the WKO community, providing 4.0 MW of power to AksaiEnergo LLP and 41 MW to Batys Energoresursy LLP for subsequent provision to regional consumers. Power export to the WKO in 2011/2012 was reduced due to reduction in generation surplus after KPC Train 4 start-up.

Until late 2011 AksaiEnergo LLP purchased power from both Russia and Uralsk-based Heat Stations.



At the forum in Aktau dedicated to creation of new production facilities in the Western Regions of Kazakhstan

DEVELOPING THE REGIONAL ECONOMY

However, since KPO has started exporting its own power produced at the KPC GTPS, fully substituting the power imported from Russia, the volume being more than 10 million. As the KPO power provided to AksaiEnergo LLP is significantly cheaper than the power imported from Russia, AksaiEnergo was able to reduce its prices for customers by almost 11 per cent.

KPO power export to the regional grid accounts for 30 per cent to 45 per cent depending on the season which is a significant contribution to the regional economy, due to low price of KPO power.

In 2012 KPO generated a total of 350,3 GWh of power for export to the WKO grid including 34,9 GWh for AksaiEnergo and 315,5 GWh for Batys Energoresursy LLP.

KPO supplies fuel (sweet) gas from the KPC to Burlin industrial and domestic consumers. In 2012 the amount of fuel gas supply was 19,8 mscm.

In 2012 overall fuel gas supply to WKO, including volumes for power generation purposes at the KPC GTPS has amounted to 110,6 mscm.

Supply of fuel gas by KPO in 2012

	2010	2011	2012
KPO fuel gas use for WKO supply, mscm	134.0	130.9	130.4
including:			
direct sales to KTGA	20.2	12.6	19.8
use for power generation for WKO	113.8	118.3	110.6
Electricity provided to WKO, GWh	390.9	378.2	350.4

SUPPORTING SOCIAL INFRASTRUCTURE

Under the terms of Annex 5 to the FPSA, from 1998 until 2009 KPO provided USD 10 million per annum to fund social infrastructure projects agreed with the West Kazakhstan Oblast Akimat in accordance with their list of social development priorities. These projects are

implemented throughout the WKO, and include schools, nurseries, hospitals and cultural and sporting facilities.

In 2009, the Joint Operating Committee resolved to double the amount of annual funding of social and infrastructure projects, from USD 10 million to USD 20 million.

Under the terms of Annex 5 to the FPSA, if the project is not completed by the end of the year, the unspent budget is carried over onto the next calendar year. This explains the large amounts shown in the tables below.

KPO receives the list of projects approved by the WKO Akimat and the JOC, and from there on the Venture overlooks the design, procurement, and project management until the turn-key project is handed over to the Republic of Kazakhstan. All works are contracted entirely to Kazakhstani companies.

In 2012, an internal consultative body called the KPO Social Projects Committee was established comprising members of the KPO national staff residing in Aksai. The aim of this Committee is to ensure the transparency and participatory decision-making during the process of selection of social projects identified for the town of Aksai and the Burlin District as a whole.



At the Opening ceremony of the secondary school in the Aksuat village



At the Opening ceremony of the new secondary school in Uralsk

DEVELOPING THE REGIONAL ECONOMY

SOCIAL AND INFRASTRUCTURE PROJECTS IMPLEMENTED IN 2012

Uralsk		
Title / Status	Project Description	Budget (Million USD)
Celebration Palace <i>Completed</i>	The Palace was built to provide a venue in Uralsk where people could congregate to stage their cultural, or social events. The Celebration Palace conforms to modern architectural requirements, sanitary and construction norms. It is located in micro district 7 and is considered to be one of the new symbols of the city.	10.4
Tennis court <i>Ongoing</i>	The tennis complex is a two-storey building that will consist of indoor and outdoor tennis courts including stands with seats for 300 spectators. The complex will be able to host international competitions. Project progress is 10 per cent.	2.9
School for 1200 children in Uralsk <i>Completed</i>	The school is a three-storey building located in Samal street of Uralsk. It consists of five blocks that will accommodate 1200 pupils in 48 classrooms, a canteen, a sick bay, a conference room, a gymnasium, a lift, an amenity block, a library, laboratories and workshops. There are also special rooms for basic military training. The school is fully furnished and equipped on a turn-key basis.	10.3
Kindergarten for 350 children <i>Ongoing</i>	The kindergarten is a two-storey building that will accommodate 350 children (16 groups) including 16 playgrounds with shelters and game equipment, an area for sports and a garden. The building will be fully equipped and furnished on a turn-key basis. Project progress is 59.63 per cent.	3.7
Total		27.3



Celebration Palace built in Uralsk

DEVELOPING THE REGIONAL ECONOMY

Burlin Distrct		
Title / Status	Project Description	Budget (Million USD)
Repair of Sovetskaya Street - Aksai <i>Completed</i>	The project is aimed to improve the quality of the motor road and sidewalks in Sovetskaya street in Aksai.	1.38
Repair of the Central Boiler House - Aksai <i>Completed</i>	Upgrade of the heating system in microdistrict 10 through installation of a new boiler, replacement of pumping equipment, internal repair of boiler house	1.06
School workshop - Zharsuat <i>Completed</i>	This workshop is an auxiliary premise where kids are taught the basic technical crafts and skills such as: carpentry, blacksmith works, joinery, etc.	0.13
School - Uspenovka <i>Completed</i>	The old and largely dilapidated building of the Uspenovka village school has been fully refurbished.	0.50
Technical water supply system - Uspenovka <i>Completed</i>	The stable supply of technical water will enable villagers to irrigate their gardens, feed the livestock and use it for other household needs. The total length of the new pipeline is 10.5 kilometres. As part of the project, a new pump station was built, new water pipes were laid and connected to 130 residential houses and public buildings.	0.25
Potable water supply - Berezovka Burlinskiy district <i>Completed</i>	The project is aimed to provide potable water for the residents of Berezovka, one of the Field adjacent villages.	2.0
Total		5.32

DEVELOPING THE REGIONAL ECONOMY

SOCIAL AND INFRASTRUCTURE PROJECTS IMPLEMENTED IN 2012

Elsewhere in the WKO		
Title /Status	Project Description	Budget (Million USD)
School - Aksuat , Akzhaik district <i>Completed</i>	The two-storey building is designed to accommodate 198 pupils aged from 6 to 17. The school was built in compliance with leading construction norms and standards, and was handed over fully furnished and equipped.	2.9
School - Saikuduk <i>Ongoing</i>	The school is aimed to accommodate 198 children from the Saikuduk village of the Akzhaik district, it has classrooms, a gym, a conference hall, a canteen and a library. The school will be fully furnished and equipped on a turn-key basis. Project progress is 43.25 per cent.	2.9
School - Koneketken <i>Completed</i>	The school accommodates 198 children, it is fully equipped with furniture, computers and other teaching tools. It's a two-storey building with classrooms, sports and conference halls; brand new classes of Chemistry, Physics and Biology, metal art workshops, a sewing workshop, a canteen for 65 people and a library. In addition, the school area has been planted with trees and landscaped. The school was fully furnished and equipped on a turn-key basis.	2.89
School - Ushagash, Karatobe district <i>Completed</i>	The school is designed to accommodate 108 children; it's a two-storey building with classrooms, a gym, a conference room, laboratories of chemistry and biology, a classroom for basic military training, a canteen and a library. The turn-key project includes a full set of furniture equipment.	2.65
Motor roads - Uralsk <i>Ongoing</i>	Construction of 15 km of city motor roads. Project progress is 82 per cent.	1.3
Outpatient clinic - Bisen, Bokeiorda district <i>Completed</i>	The outpatient clinic aims to improve the quality of medical services provided to the residents of this distant village some 600 km off Uralsk. It was built as part of the Government's "100 schools, 100 hospitals" program.	1.0
Cultural centre - Sary-Omir <i>Completed</i>	The cultural centre was fully equipped and handed over on a turn-key basis.	2.19
	Total	15.83

IN DIALOGUE WITH THE COMMUNITIES

KPO is committed to being a good neighbour to the communities around its operations and to supporting local authorities in pursuing the communities' development goals. We therefore work to avoid or minimise negative impacts and maximise the benefits from our presence, maintain an effective communication and relationship with all stakeholders, and create opportunities to enhance benefits to the society.

A STRATEGIC APPROACH

The reference framework for the KPO activities in this area is set by the Social Performance Policy and Standards, supported by a number of operating procedures, introduced in 2009 and inspired by the Performance Standards of the International Finance Corporation. Though our social performance extends to reach all our society stakeholders, special attention is given to our area of direct impact, defined by the proximity to the KPO operations. In May 2012, KPO issued its 2012 Social Performance Plan, with the purpose of supporting the delivery of KPO business objectives by securing alignment with community and Government objectives and managing our relevant operational and project risks. Through this, KPO aims to contribute to the socio-economic aspects of the broader sustainable development agenda of the neighbouring communities and the Republic of Kazakhstan.

BUILDING A CONSTRUCTIVE DIALOGUE

Consultations are a fundamental pillar of the KPO activities in the social performance sphere. Different tools are adopted, ranging from formalized consultative bodies (Village Councils) to public hearings and ad-hoc meetings with the local authorities, NGOs and other key informants.

Village Councils covering the eight villages closest to the field have been set up in the four rural districts around the Karachaganak field. These consultative bodies were established in 2005 by a tripartite Memorandum of

Understanding between KPO, the WKO Burlin Region Maslikhat and Akimat. Locally trusted village residents, representatives from the local authorities, initiative groups and KPO experts meet regularly and on an ad-hoc basis whereby they can raise issues of interest or concern and receive updates on current and planned KPO activities.

The Village Councils are also consulted to help identify priorities for the KPO's social and economic investment in the villages. This dialogue enables KPO to respond to issues, discuss proposals and initiatives as they emerge and develop opportunities, which benefit both KPO and the neighbouring communities.

In 2012, the Village Councils had a total of 16 sessions. During the meetings the Village Council members and the KPO Community Relations staff discussed programmes to be implemented with the support from KPO. In particular, KPO was repeatedly requested to resume the halted programmes for provision of Summer Camps for rural school children and health improvement programme for the elderly people at the Akzhaik sanatorium near Uralsk. The school principals asked to furnish 8 rural schools with kitchen equipment. Others were interested to hear the results of the long-term environmental and geo-dynamic surveys conducted in their respective villages with the support of KPO. Residents of Bestau, Berezovka and Zhanatalap raised concerns about the quality of drinking water in their villages.

PUBLIC HEARING

In September 2012, KPO hosted a Public Hearing on 2013 Environment Protective Measures Plan with the support of the Burlin Region

Maslikhat (Council) and Akimat. Residents of the Karachaganak Field adjacent villages, members of interest groups, community activists and mass media were also invited to attend.

The attendees were provided with the information on the environment protective measures planned for 2013. Its key priorities are water resources conservation, waste management and consumption, and air protection. In the follow-up discussions, the community, government authorities and mass media representatives had an opportunity to ask questions about air quality, tree-planting measures, used water resources processing, etc. All of the suggestions and remarks given by attendees of the Public Hearing were included into the Minutes of the Meeting.



**At the Public Hearing on the 2013
Environmental Protective Measures Plan**

IN DIALOGUE WITH THE COMMUNITIES

HANDLING COMPLAINTS AND SUGGESTIONS

KPO has a formal policy in place for handling complaints and suggestions. Every resident of the neighbouring villages has the right to raise a complaint or suggestion, either verbally to a KPO Community Liaison Officer or in writing using dedicated forms and boxes installed in the public areas of all the eight villages adjacent to the Field. The Company then investigates a complaint or suggestion and makes a proposal for its settlement or application.

To improve the efficiency of this mechanism, the KPO's Community Grievance and Suggestion procedure was updated in July 2012, taking into account the lessons learnt in the previous years.

All of the grievances or suggestions raised in 2012 were closed appropriately by KPO obtaining the prior agreement of complainants, either by phone or face-to-face meeting. Complaints are mostly lodged by direct appeal to the KPO Community Liaison staff that often visits the villages. The KPO Community Liaison staff's visit schedule is placed on the KPO Information Board in the eight neighbouring villages.

Monitoring and preventing impacts on local communities

The Sanitary Protection Zone (SPZ) exists along the perimeter of the Karachaganak Oil Gas Condensate Field (KOGCF) with the aim to act as a buffer zone between the industrial plant and the communities. The Sanitary Protection Zone is a protective barrier ensuring reliable level of safety for the population during facilities operation in normal process mode.

In 2012, KPO agreed the estimated SPZ project with the RoK Ministry of Health obtaining conclusion No.46 dated 04.04.2012 and commenced a one-year Field Observations Programme. The programme comprises detection of pollutants concentrations in the atmospheric air, in order to validate the accuracy of the estimated SPZ. Air sampling and tests are conducted per 4 compass points (N, E, W, S) of the SPZ involving the Government Sanitary-Epidemiological Surveillance authorities (SSES)

and the accredited contractor laboratory. Upon completion of the field observations programme, KPO will proceed to developing the established SPZ project.

In accordance with the legislation requirements a mandatory public hearing will be held at this stage.

Air monitoring system includes, but not limited to:

- Continuous air monitoring via stationary automatic environmental monitoring stations (EMS). 14 automatic EMS are installed within the KOGCF and along the perimeter of the SPZ. Environmental Monitoring Stations are in continuous operation and integrated into the automatic system of environmental monitoring. The Automatic environmental monitoring system is a notification system and a system of collecting data on air quality within the KOGCF. The notification system activates an alarm when the level of pollutants in the air emitted as a result of production activities at the field units exceeds the relevant allowable limits. Environmental Monitoring Stations enable to gather real-time data on air quality and volume in terms of main pollutants such as hydrogen sulphide (H₂S), sulphur dioxide (SO₂), nitrogen dioxide (NO₂) and carbon monoxide (CO).

The registered concentrations of monitored components are compared with the sanitary standards and expressed as MPC fraction in order to determine the level of environmental pollution.

The MPC (maximum permissible concentration) is an indicator of the impact of one or more polluting substances in the air, the exceedance of which has harmful effects on human health and the environment. According to the data from the automated EMS installed at the KOGCF SPZ boundary, the concentrations of monitored components did not exceed the MPC, and their annual



Mobile Environmental Monitoring Station

average values were: hydrogen sulphide (H₂S)- 0.13 MPC, sulphur dioxide (SO₂) – 0.14 MPC, nitrogen oxides (NO₂) – 0.1 MPC, carbon monoxide (CO) – 0.1 MPC.

In February 2012, two new automated environmental monitoring stations in Berezovka village were commissioned and commenced its operation in order to enhance the air quality control.

The KPO Corporate Environment and Community Relations Departments organised and provided a presentation on the function and purpose of these two environmental monitoring stations at the Village Council meeting with the Berezovka Village residents. The Village Council meeting was also attended by the environmental authorities from the West Kazakhstan Oblast and the Burlin District.

In accordance with the data obtained from EMS-013 and EMS-014 the annual average concentrations of monitored components did not exceed the following values: hydrogen sulphide - 0.13 MPC, sulphur dioxide - 0.08 MPC, nitrogen dioxide - 0.25 MPC, carbon monoxide - 0.07 MPC.

Two additional EMS were installed at the KOGCF SPZ boundary in December, 2012 - in SW and SE. It is planned to install two more automated EMS in the northern part of the SPZ boundary - on the NW and NE before the end of 2013.

IN DIALOGUE WITH THE COMMUNITIES

- **Sampling and test of air samples at the boundary of the existing SPZ.**

In accordance with the 2011-2013 Environmental Monitoring Programme, the air sampling at the boundary of the KOGCF SPZ is conducted in compliance with the Government Standard GOST 17.2.3.01-86 'Nature protection. Atmosphere. Rules to monitor air quality of settlements', GOST 12.1.005-88 and RD 52.04.186-89 'Air pollution control manual'. Monitoring of the pollutants content in the ambient air is carried out under discretely four times per day at 1, 7, 13 and 19 o'clock on 8 rhumbs. So, the overall monitoring programme provides data on one-time and daily average pollutant concentrations at the same time. The tests are conducted by the accredited contractor laboratory.

- 6 main components are monitored such as: hydrogen sulphide, sulphur dioxide, nitrogen dioxide, carbon oxide, methane, methyl mercaptan. According to the air monitoring results in 2012, the annual average concentration of the monitored components did not exceed the following values: hydrogen sulphide - 0.25 MPC, sulphur dioxide - 0.03 MPC, nitrogen dioxide - 0.36 MPC, carbon monoxide - 0.086 MPC, methane - 0.02 MPC, methyl mercaptan - below of the detection limit.

Routine air monitoring in ten villages, namely: Aksai, Berezovka, Bestau, Zharsuat, Zhanatalap, Dimitrovo, Karachaganak, Karakemir, Priuralnoye, Uspenovka is carried out through the installed stationary stations, equipped with all necessary instrumentation. Monthly reports on the air quality are published in local media and sent to the villages for posting on information boards. The stations are also used for immediate air sampling in case of odour complaints by residents.

7 components are monitored in the air of villages adjacent to the KOGCF: hydrogen sulphide, sulphur dioxide, nitrogen dioxide, carbon oxide, benzene, toluene, and xylene. According to the air monitoring results obtained in 2012, the annual

average concentration of the monitored components did not exceed the following values: hydrogen sulphide - 0.25 MPC sulphur dioxide - 0.26 MPC, nitrogen dioxide - 0.75 MPC, carbon monoxide - 0.18 MPC, benzene - 0.36 MPC, toluene - 0.02 MPC, xylene - 0,065 MPC.

Two mobile environmental monitoring stations available in KPO are used to ensure additional air quality monitoring activities. In the event of receiving gas odour complaints from the residents these stations are immediately mobilized to the site to take air samples. Thanks to the efficient monitoring system KPO has accurate and timely data to ensure early detection and prompt response to potential maximum permissible concentration exceedance.

During 2012 there were no cases of MPC exceedance of monitored components in the air at the KOGCF SPZ boundary and in the air of the settlements adjacent to the Field that may be related to operations of the KOGCF facilities.

A research survey, started in 2011, to review environmental conditions in the communities adjacent to the Karachaganak Field was continued in 2012. The above mentioned research covering the period from 2011 until 2014 will also be focused on monitoring of pollutants concentration in environmental components and the agricultural products.

The long-term monitoring will enable obtaining the data needed to assess the dynamic condition of ecosystems in the villages adjacent to the KOGCF.

In May 2012, a presentation was held in the Berezovka village where the residents were informed of the intermediate results of the studies held in 2011.

In 2012, the Field studies of cultivated vegetable crops quality, the quality of soil and water sources, physiological condition of livestock were performed in the Berezovka village, the Burlin district, and the Dolinnoye village, the Terektinsky district. Currently the

laboratory analysis is being carried out and the annual intermediate report is being prepared. It is scheduled to communicate the intermediate results of the studies to the Berezovka Village residents in the first quarter of 2013.

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 have been installed in 11 villages where more than 6,000 residents live. The systems control is maintained 24 hours a day by KPO. Moreover, 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. Particular attention is given to the residents of communities living in the immediate vicinity of the Field and the Karachaganak – Bolshoy Chagan – Atyrau Export Pipeline. Regular sessions and trainings are provided to the residents of the said communities. So, 274 sessions were conducted, 531 people trained and 107 meetings were attended by about 858 people in the communities surrounding the Karachaganak Field. KPO Emergency Response Community Preparedness Specialists visited 60 villages located along the Karachaganak – Bolshoy Chagan – Atyrau Export Pipeline. Meetings with more than 600 people residing in the communities along the export pipeline were held during the working trip.



Village Council meeting in the Berezovka village

IN DIALOGUE WITH THE COMMUNITIES

At the meetings people were provided with clarifications on key issues such as the role and importance of KPO in the Kazakhstan's economy, actions that need to be taken as part of the emergency response procedure, communities' notification procedures in the event of potential emergency at a KPO facility, and measures that would be taken to eliminate the emergency.

SUPPORTING DEVELOPMENT

Improving livelihoods is a key aspiration for the communities around Karachaganak, and KPO strives to be supportive of these aims, complementing the efforts made by the local authorities.

Community development activities are conducted to fulfil KPO's responsibilities with respect to the neighbouring communities and to contribute to their long term development.

Through the Village Councils, the communities which we support 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. Following this exercise a set of community development projects is agreed and implemented in the eight villages surrounding the Field. Over the years, we aim at maintaining the balance of support across the different villages.

The KPO initiatives implemented in 2012 to support the local communities in the following areas:

Community Health

In 2012, taking into consideration the repeated requests of the neighbouring communities KPO had an opportunity to implement some of its halted long-term community development programmes. Thus, 160 pensioners from the five rural districts (Beryozovskiy, Uspenovskiy, Zharsuatskiy, Priuralnyi and Kzyltalskiy) had a



KPO sponsors summer holidays for village children

recreation in the Akzhaik sanatorium located in the WKO, as part of the KPO's health improvement programme for elderly people. Besides, KPO implemented the Summer Camps Programme for 160 children in the age groups of 7 to 14 years old from the above rural okrugs at the Talap Summer Camp located in Uralsk, the WKO.

In 2012, KPO conducted a community survey interviewing rural elderly people and children in order to explore the quality of services provided in the above mentioned organisations, including the work of the KPO Community Relations Department. 320 people were interviewed, through which both qualitative and quantitative information was received. This information will be communicated to the providers of the services, in order to improve their quality in 2013. In general, all respondents highly evaluated the quality of medical treatment, accommodation conditions, meals and entertainment both at "Akzhaik" and "Talap". Community members also noted the work of the KPO Community Relations Department that helped to organise the programmes. The rural community members expressed hope that KPO will continue sponsoring such programmes for the benefit of the local communities.

On the eve of the Victory Day in 2012, the KPO Community Relations Department employees visited 21 war veterans from the eight villages adjacent to the Karachaganak Field and gave jackets.

Education

In 2012, KPO continued to support the Pilot Community Scholarship Project launched in 2010 in cooperation with the Burlin District Education Department to ensure the availability of professionals in the rural districts. Children from the villages are funded to have specific education under the commitment for them to come back to their rural district and serve for a certain number of years. First three students are continuing their third year studies at the West Kazakhstan University and College.

At the end of 2012, KPO concluded a Memorandum of Cooperation with the Burlin District Education Department and the Public Foundation "Zhiger" to provide sponsorship assistance to schools in the Burlin district. Taking into account the requests that KPO received during 2012 from the local communities, KPO made a decision to transfer the sponsorship funds for purchase of required equipment and materials for a number of schools in Aksai and the neighbouring communities. The mentioned Public Foundation will purchase and install a full set of kitchen equipment, furniture and computers at the eight Schools in the villages located in close proximity to the Karachaganak Field and the town of Aksai. The KPO Community Relations Department will be involved in the monitoring of procurement and handover process of the mentioned equipment during 2013.

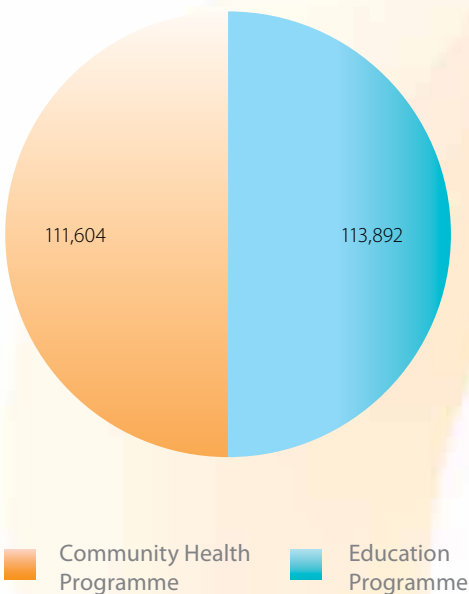
Developing capacities of Local non-profit Organisations

In 2012, a series of trainings for 10 non-profit organisations based in the WKO and the Burlin District was held in Uralsk and Aksai. This social project titled "Support and Organisational Development of the WKO Non-Commercial organisations" was funded by "BG Kazakhstan" company, which is one of the KPO partner companies, involving the "Civil Alliance of Kazakhstan".

The aim of the project was the improvement of the social services provided to local communities

IN DIALOGUE WITH THE COMMUNITIES

KPO 2012 Charity & Sponsorship Budget, USD



through improving the competencies and capacity building of local non-profit organisations. A series of trainings for urban and rural non-profit organisations working with vulnerable groups of population was implemented at three stages in August, September and November 2012. The KPO's role in this project was to prepare a list of non-profit organisations, which had been the beneficiaries of its sponsorship programme over a number of previous years. Besides, KPO assisted BG Kazakhstan and "Civil Alliance of Kazakhstan" in making an initial needs assessment for mentioned non-profit organisations.

The workshops facilitated the development of the attendants' skills in business planning, budgeting, project management and fund-raising.

All non-profit organisations' representatives who attended these workshops highlight their importance and value, as they not only build capacities of such organisations, but also develop their networking and help to improve their services to local communities.

In 2012, the KPO Community Relations staff was involved in the monitoring of the projects sponsored at the end of 2011 and attended a number of handover ceremonies held by local non-profit organisations.

INFRASTRUCTURAL PROJECTS IN THE NEIGHBOURING COMMUNITIES

As was mentioned in the previous Chapter, in 2012 several projects proposed by Village Councils had been implemented by KPO with the aim to improve the basic social infrastructure of the villages and their social life.

These projects include the upgrade of the water supply system in the Berezovka village, reconstruction of the school workshop in the Zharsuat village, complete repair of the school in the Uspenovka village, and reconstruction of the summer irrigation water system in the Uspenovka village. The details are provided in the previous Chapter.

In 2012 KPO completed the reconstruction of

the Uspenovka village school, which will make it possible to educate 260 schoolchildren. There are 10 classrooms, one gymnasium, a conference room, a mini-centre and a canteen at the school.

The renovations including the full reconstruction of the existing building, the boiler house, the rehabilitation of the water and sewage systems was performed by a local company.

The inauguration ceremony dedicated to successful completion of the reconstruction of the Uspenovka village school was attended by the KPO senior management, local authorities, contractor company representatives and media. Uspenovka Village School Principal Mr. G. Zainullin on behalf of the local community expressed his appreciation to KPO for its continued support provided to the Uspenovka village and expressed hope that such fruitful cooperation of KPO and the Village Councils will continue.

In 2012 KPO also completed the reconstruction of the school workshop in the Zharsuat village.

Upon completion of reconstruction of the summer irrigation water system in the Uspenovka Village, KPO held a Village Council meeting with the Uspenovka Village local authority, Community representatives, with the involvement of the Burlin District Maslikhat Deputies, contracting company representatives to announce the completion of the project. The community representatives had an opportunity to ask questions about the operation and maintenance of the water system during the summer season and thanked KPO for support provided to the Uspenovka community.



Grand piano donated to the Children's Music School of Aksai

Charity & Sponsorship Budget

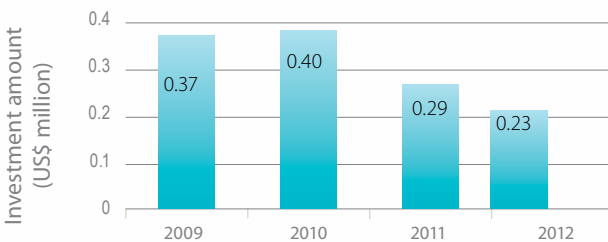


TABLE OF STANDARD DISCLOSURES

Prepared in compliance with the requirements of the Global Reporting Initiative's (GRI) G3.0, the KPO 2012 Sustainability Report meets the B+ GRI application reporting level. In the table below we provide an index to our disclosures against the GRI indicators.

Yes	Indicator is covered in full.
Partial	Indicator is covered in part.
Not applicable	Indicator does not apply to KPO's business

Profile disclosure	GRI Indicator	Section and page / Response	Disclosure status
STANDARD DISCLOSURES PART I: Profile Disclosures			
1. Strategy & Analysis			
1.1	Statement from the most senior decisionmaker of the organization (e.g., CEO, chair, or equivalent senior position) about the relevance of sustainability to the organization and its strategy	Letter from General Director (p. 6-7)	Yes
1.2	Description of key impacts, risks, and opportunities	Our Performance and Targets (p. 8-12), Letter from General Director (p. 6-7), Overview of the Karachaganak Operations (p. 16), Risk Management (p. 24)	Yes
2. Organisational Profile			
2.1	Name of the organization	Report Profile (p. 5)	Yes
2.2	Primary brands, products, and/or services	Overview of the Karachaganak Operations (p. 14-16)	Yes
2.3	Operational structure of the organization, including main divisions, operating companies, subsidiaries, and joint ventures	Corporate Governance (p. 19-23)	Yes
2.4	Location of organization's headquarters	Feedback (back cover)	Yes
2.5	Number of countries where the organization operates	Overview of the Karachaganak Operations (p. 14)	Yes
	Names of countries with either major operations or that are specifically relevant to the sustainability issues covered in the report		Not applicable
2.6	Nature of ownership and legal form	Overview of the Karachaganak Operations (p. 14)	Yes
2.7	Markets served (including geographic breakdown, sectors served, and types of customers/beneficiaries)	Overview of the Karachaganak Operations (p. 14-15)	Yes
2.8	Scale of the reporting organization, including: · Number of employees	Our People are our Asset (p. 52), Overview of the Karachaganak Operations (p. 14)	Yes
	· Net sales (for private sector organizations) or net revenues (for public sector organizations)		Not reported due to confidentiality limitations under the FPSA ¹
	· Total capitalization ¹ broken down in terms of debt and equity (for private sector organizations); and		Not applicable
	· Quantity of products or services provided	2012 Production (p. 16)	Yes

TABLE OF STANDARD DISCLOSURES

Profile disclosure	GRI Indicator	Section and page / Response	Disclosure status
STANDARD DISCLOSURES PART I: Profile Disclosures			
2. Organisational Profile			
2.9	Significant changes during the reporting period regarding size, structure, or ownership including the location of, or changes in operations, including facility openings, closings, and expansions;	Letter from General Director (p. 6-7), Overview of the Karachaganak Operations (p. 16)	Yes
	Significant changes regarding size, structure, or ownership including changes in the share capital structure and other capital formation, maintenance, and alteration operations (for private sector organizations)		Not applicable
2.10	Awards received during the reporting period.	Letter from General Director (p. 6-7)	Yes
3. Report Parameters (including Dislcose on Management Approach)			
3.1	Reporting period (e.g., fiscal/calendar year) for information provided	Report Profile (p. 5), Letter from General Director (p. 6-7)	Yes
3.2	Date of most recent previous report (if any)	Report Profile (p. 5)	Yes
3.3	Reporting cycle (annual, biennial, etc.)	Report Profile (p. 5)	Yes
3.4	Contact point for questions regarding the report or its contents	Feedback (back cover)	Yes
3.5	Process for defining report content, including: · Determining materiality	Report Scope and Boundaries (p. 5), Stakeholders (p. 5), Stakeholder engagement (p. 26-28)	Yes
	· Prioritizing topics within the report; and	Sustainability team, other controllers and managers have worked together to identify and present sustainability information they believe is important for stakeholders.	Yes
	· Identifying stakeholders the organization expects to use the report	Stakeholder engagement (p. 26)	Yes
3.6	Boundary of the report (e.g., countries, divisions, subsidiaries, leased facilities, joint ventures, suppliers)	Overview of the Karachaganak operations (p. 14), Our People are our Asset (p. 52)	Yes
3.7	State any specific limitations on the scope or boundary of the report	No limitations	Yes
3.8	Basis for reporting on joint ventures, subsidiaries, leased facilities, outsourced operations, and other entities that can significantly affect comparability from period to period and/or between organizations	Report profile (p. 5)	Yes
3.9	Data measurement techniques and the bases of calculations, including assumptions and techniques underlying estimations applied to the compilation of the Indicators and other information in the report. Explain any decisions not to apply, or to substantially diverge from the GRI Indicator Protocols	Report profile (p. 5) Some indicators (LTI - p. 30, GHG - p. 44-45) have been benchmarked against the OGP criteria	Yes
3.10	Explanation of the effect of any re-statements of information provided in earlier reports, and the reasons for such re-statement (e.g., mergers/acquisitions, change of base years/periods, nature of business, measurement methods)	GHG Reduction Strategy (p. 43-46)	Yes ²

TABLE OF STANDARD DISCLOSURES

Profile disclosure	GRI Indicator	Section and page / Response	Disclosure status
STANDARD DISCLOSURES PART I: Profile Disclosures			
3. Report Parameters (including Disclclose on Management Approach)			
3.11	Significant changes from previous reporting periods in the scope, boundary, or measurement methods applied in the report	GHG emissions (p. 44-45)	Yes ²
3.12	Table identifying the location of the Standard Disclosures in the report	Table of Standard Disclosures (p. 69-75)	Yes
3.13	Policy and current practice with regard to seeking external assurance for the report	Report profile (p. 5)	Yes
4. Governance, Commitments, and Engagement			
4.1	Governance structure of the organization, including committees under the highest governance body responsible for specific tasks, such as setting strategy or organizational oversight	Corporate Governance (p. 19-20)	Yes
	Indicate any direct responsibility for economic, social and environmental performance of such committees		Not applicable
4.2	Indicate whether the Chair of the highest governance body is also an executive officer (and, if so, their function within the organization's management and the reasons for this arrangement)	Corporate Governance (p. 19-20)	Yes
4.3	For organizations that have a unitary board structure, state the number of members of the highest governance body that are independent and/or non-executive members		Not applicable
4.4	Mechanisms for shareholders and employees to provide recommendations or direction to the highest governance body	Corporate Governance (p. 19-20), Our People are our Asset (p. 56)	Yes ³
4.5	Linkage between compensation for members of the highest governance body, senior managers, and executives (including departure arrangements), and the organization's performance (including social and environmental performance)	Corporate Governance (p. 19-20)	Yes
4.6	Processes in place for the highest governance body to ensure conflicts of interest are avoided	Corporate Governance (p. 19-20)	Yes
4.7	Process for determining the composition, qualifications, and expertise of the members of the highest governance body and its committees, including any consideration of gender and other indicators of diversity	Corporate Governance (p. 19-20) High level of qualifications and expertise of the members of senior managment, including economic, environmental and social topics, is confirmed by many years of their effective service.	Yes
4.8	Internally developed statements of mission or values, codes of conduct, and principles relevant to economic, environmental, and social performance and the status of their implementation	Corporate Governance (p. 24-25), Our Performance and Targets (p. 8-12),	Yes
4.9	Procedures of the highest governance body for overseeing the organization's identification and management of economic, environmental, and social performance, including relevant risks and opportunities, and adherence or compliance with internationally agreed standards, codes of conduct, and principles	Corporate Governance (p. 20)	Yes

TABLE OF STANDARD DISCLOSURES

Profile disclosure	GRI Indicator	Section and page / Response	Disclosure status
STANDARD DISCLOSURES PART I: Profile Disclosures			
4. Governance, Commitments, and Engagement			
4.10	Processes for evaluating the highest governance body's own performance, particularly with respect to economic, environmental, and social performance	There are no specific procedures in place for JOC efficiency review	Yes
4.11	Explanation of whether and how the precautionary approach or principle is addressed by the organization	Health, Safety and Security (p. 29) The Company considers it important to carry out necessary expert reviews and studies in order to minimize adverse environmental impacts of planned activities	Yes
4.12	Externally developed economic, environmental, and social charters, principles, or other initiatives to which the organization subscribes or endorses	In dialogue with the Communities (p. 64)	Yes
4.13	Memberships in associations (such as industry associations) and/or national/international advocacy organizations in which the organization: * Has positions in governance bodies; * Participates in projects or committees; * Provides substantive funding beyond routine membership dues; or * Views membership as strategic	Corporate governance (p. 28)	Yes
4.14	List of stakeholder groups engaged by the organization.	Stakeholder engagement matrix (p. 26)	Yes
4.15	Basis for identification and selection of stakeholders with whom to engage	Stakeholder engagement (p. 26-27)	Yes ⁴
4.16	Approaches to stakeholder engagement, including frequency of engagement by type and by stakeholder group	Stakeholder engagement (p. 26-28)	Yes
4.17	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	Stakeholders engagement (p. 26-28)	Yes
<div> <div>Notes:</div> <div> <p>¹ As an Operator acting under the Final Production Sharing Agreement (FPSA) on behalf of the four Parent Companies, KPO reports on the reserves in place, on gross annual production and sales and on the number of employees. The Parent Companies of the Karachaganak Venture are the owners of information related to net revenues, and total capitalisation data.</p> <p>² Assessment method for GHG emissions has been changed to a more detailed approach approved in the RoK legislation.</p> <p>³ In the KPO Venture governance, voting amongst the four Karachaganak Venture partners is unanimous. Shareholders are represented to the highest governance body. No mechanisms for employees in place to provide their feedback to the highest governance body.</p> <p>⁴ Processes with other relevant stakeholders are determined by several policies and procedures, such as the Karachaganak Community Engagement Plan, the Stakeholder Engagement Operating Procedure, the KPO Sponsorship and Donations Policy, the Internal Communications Policy, the Local Content Development Programme and others.</p> </div> <div> <p>Disclosure Item 2.8</p> <p>Disclosure Items 3.10 and 3.11</p> <p>Disclosure Item 4.4</p> <p>Disclosure Item 4.15</p> </div> </div>			

TABLE OF STANDARD DISCLOSURES

Profile disclosure	GRI Indicator	Section and page / Response	Disclosure status
STANDARD DISCLOSURES PART II: Performance Indicators			
Economic Performance Indicators			
EC 4	Significant financial assistance received from government	KPO does not benefit from direct and indirect (e.g. tax releases) significant government support	Yes
EC 6	Policy, practices, and proportion of spending on locally-based suppliers at significant locations of operation. (Core)	Developing the Regional Economy (p. 58-63), Letter from General Director (p. 6-7)	Yes
EC 7	Procedures for local hiring and proportion of senior management hired from the local community at significant locations of operation (Core)	Our People are our Asset (p. 55-56),	Yes
EC 8	Development and impact of infrastructure investments and services provided primarily for public benefit through commercial, in-kind, or pro bono engagement	Our People are our Asset (p. 55-56), Developing the Regional Economy (p. 58-63), In Dialogue with the Communities (p. 65-68), Letter from General Director (p. 6-7), Stakeholder Engagement (p. 26-28)	Yes
EC9	Understanding and describing significant indirect economic impacts, including the extent of impacts	Developing the Regional Economy (p. 58-63), Letter from General Director (p. 6-7)	Yes
Environmental Performance Indicators			
EN 8	Total water withdrawal by source (Core)	Water (p. 46-47)	Yes
EN 10	Percentage and total volume of water recycled and reused. (Additional)	Water (p. 47)	Yes
EN 11	Location and size of land owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas (Core)	Biodiversity and Ecosystems (p. 51), Gryphone Area Remediation (p. 51), Overview of Karachaganak Operations (p. 17-18)	Yes
EN 13	Habitats protected or restored (Additional)	Gryphone Area Remediation (p. 51)	Yes
EN 14	Strategies, current actions, and future plans for managing impacts on biodiversity (Additional)	Biodiversity and Ecosystems (p. 51)	Partial
EN 16	Total direct and indirect greenhouse gas emissions by weight (Core)	GHG Reduction Strategy (p. 43-45)	Yes
EN 18	Initiatives to reduce greenhouse gas emissions and reductions achieved (Additional)	GHG Reduction Strategy (p. 45)	Yes

TABLE OF STANDARD DISCLOSURES

Profile disclosure	GRI Indicator	Section and page / Response	Disclosure status
STANDARD DISCLOSURES PART II: Performance Indicators			
Environmental Performance Indicators			
EN 20	NOx, SOx, and other significant air emissions by type and weight (Core)	Emissions to air (p. 41)	Yes
EN 21	Total water discharge by quality and destination (Core)	Water (p. 46-47)	Yes
EN 22	Total weight of waste by type and disposal method (Core)	Waste Management (p. 48-50)	Yes
EN 23	The total number and total volume of recorded significant spills	Spills (p. 51)	Yes
Labor Practices and Decent Work Performance Indicators			
LA 1	Total workforce by employment type, employment contract, and region (Core)	Our people are our asset (p. 52-53)	Yes
LA 2	Total number of employees leaving employment during the reporting period broken down by age group gender, and region	Our people are our asset (p. 53)	Yes ¹
LA 3	Benefits provided to full-time employees that are not provided to temporary or part-time employees, by major operations	Our people are our asset (p. 56-57)	Yes
LA 4	Percentage of employees covered by collective bargaining agreements (Core)	Our people are our asset (p. 56)	Yes
LA 5	The minimum number of weeks notice typically provided to employees and their elected representatives prior to the implementation of significant operational changes that could substantially affect them	Our people are our asset (p. 57)	Yes
LA 7	Rates of injury, occupational diseases, lost days, and absenteeism, and number of work-related fatalities by region (Core)	Safety Performance in 2012 (p. 29-33)	Yes ⁵
LA 9	- Report whether formal agreements (either local or global) with trade unions cover health and safety	Our people are our asset (p. 57)	Yes
LA 10	Average hours of training per year per employee by employee category (Core)	Training and Development (p. 54)	Yes ²
LA 11	Programs for skills management and lifelong learning that support the continued employability of employees and assist them in managing career endings	Compensation and Benefits (p. 56-57)	Partial
LA 12	Percentage of employees receiving regular performance and career development reviews	Compensation and Benefits (p. 56)	Yes
LA 13	Composition of governance bodies and breakdown of employees per category according to gender, age group, minority group membership, and other indicators of diversity	Development of national personnel (p. 55-56)	Partial ³
LA 14	Ratio of basic salary of men to women by employee category		Yes ⁴

TABLE OF STANDARD DISCLOSURES

Profile disclosure	GRI Indicator	Section and page / Response	Disclosure status
STANDARD DISCLOSURES PART II: Performance Indicators			
Human rights			
HR2	Percentage of significant suppliers and contractors that have undergone screening on human rights and actions taken	Anti-corruption due diligence process (p. 25)	Partial
HR3	Total hours of employee training on policies and procedures concerning aspects of human rights that are relevant to operations, including the percentage of employees trained	Compliance Framework (p. 24-25)	Yes
Society			
SO3	Percentage of employees trained in organization's anti-corruption policies and procedures	Compliance Framework (p. 25)	Yes
Product Responsibility			
PR 7	Total number of incidents of non-compliance with regulations and voluntary codes concerning marketing communications, including advertising, promotion, and sponsorship, by type of outcomes	Product specification compliance (p.16)	Yes
Notes:	<p>¹ Disclosure of turnover by region is irrelevant, as over 90 per cent of employees are engaged in the operational activities in Aksai.</p> <p>² Training for expatriate personnel is not foreseen by the FPSA.</p> <p>³ Diversity information for management is provided on gender, age group, and nationality. Other categories are not relevant.</p> <p>⁴ Basic salaries are established for employee categories regardless of gender, and so basic salaries for women and men are equal.</p> <p>⁵ Information on absentee rate for independent contractors is not collected, apart from injuries.</p>		<p>Disclosure Item LA 2</p> <p>Disclosure Item LA 10</p> <p>Disclosure Item LA 13</p> <p>Disclosure Item LA 14</p> <p>Disclosure Item LA 7</p>

ASSURANCE STATEMENT



Independent Assurance Report on the Karachaganak Sustainability Report 2012 of Karachaganak Petroleum Operating B.V.

**To the management and stakeholders of
Karachaganak Petroleum Operating B.V.**

Engagement

At the request of Karachaganak Petroleum Operating B.V. (hereinafter 'KPO') we have performed an assurance engagement.

The subject matter of our engagement is the qualitative and quantitative information disclosed in the 'Karachaganak Sustainability Report 2012: The Enduring Benefits of Karachaganak' (hereinafter 'the Report'). The objectives of our engagement were to provide a limited level of assurance 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 2012,
- 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 Global Reporting Initiative's Sustainability Reporting Framework (hereinafter 'the GRI Framework'), including version 3.0 of the Sustainability Reporting Guidelines (hereinafter 'the GRI G3.0 Guidelines'),
- Sustainability related policies and procedures corresponding to the KPO Sustainable Development Charter and described in the Report, exist,
- The Report is consistent with the principles and the requirements of 'B+' Application Level of the GRI G3.0 Guidelines.

As defined in the *International Framework for Assurance Engagements* issued by International Federation of Accountants (hereinafter 'IFAC'), evidence-gathering procedures in order to obtain limited assurance are substantially less in scope than procedures to obtain reasonable assurance and consequently do not enable us to obtain assurance that we would become aware of all significant matters that might be identified in a reasonable assurance engagement.

Criteria

We have assessed the subject matter of our engagement against the GRI Framework, including the GRI G3.0 Guidelines, and sustainability reporting principles of KPO which are identical to the reporting principles contained in the GRI G3.0 Guidelines as set out in the section 'Report profile' on page 5 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.

Responsibility of the Management of KPO

The management of KPO is responsible for introduction of sustainability related policies and procedures and the preparation of the Report and the information therein. 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. The choices made by the management, the scope of the Report and the reporting principles, including any inherent limitations that could affect the reliability of information, are set out in the 'Report Profile' section on page 5 of the Report.

Our Responsibility

Our responsibility is to express conclusions with regard to the subject matter of our assurance engagement.

We have performed our engagement in accordance with International Standard on Assurance Engagements 3000, Assurance Engagements Other than Audits or Reviews of Historical Financial Information, issued by IFAC.

We have performed the procedures deemed necessary to provide a basis for our conclusions. Our principal procedures were:

- 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 2012,
- Identification of material issues based on the procedures described above and analysis of identified material issues' reflection in the Report,

ASSURANCE STATEMENT



- 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,
- Visit to KPO's main offices and gas and liquid separation plant (Unit 3), to conduct interviews and observe operations and implementation of the Risk reduction programme,
- 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 G3.0 Guidelines used by KPO, and
- Assessment of compliance of information and data disclosures in the Report with the requirements of 'B+' application level of the GRI G3.0 Guidelines.

Conclusions

Based on our work performed 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 2012 in accordance with the GRI Framework 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 G3.0 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 consistent with the principles and the requirements of 'B+' Application Level of the GRI G3.0 Guidelines.

Ernst & Young Advisory LLP

Almaty

29.03.2013

GLOSSARY

Terms / Abbreviations / Definitions

AGDS	Automatic Gas Distribution Stations
AIP	Aksai Industrial Park
Akim	Head of administrative region (can be at the village, town or region level)
BAP	Biodiversity Action Plan
BBS	Behavioural Based Safety
bcm	billion cubic metres
BGK	BG Kazakhstan
CBO	Community Based Organisation
CMS	Competence Management System
CMWG	Contractor Management Working Group
CO ₂ e	Carbon dioxide equivalent
Contractor / Parent companies	Refers to BG, eni, Lukoil, Chevron and KazMunaiGaz NC
CPC	Caspian Pipeline Consortium
DLN	Dry low NO _x (burner)
EDD	Ethical Due Diligence
EPMP	Environmental Protective Measures Plan
EIA	Environmental Impact Assessment
EITI	Extractive Industries Transparency Initiative
EMS	Environmental Monitoring Station
EOPS	Early Oil Production Satellite
ER	Emergency Response
FDP	Field Development Program
FPSA	Final Production Sharing Agreement
FWPS	Field Waste Polygon Site
GHG	Greenhouse Gas
GPD	General Project Development
GPI	General Purpose Incinerator
GRI	Global Reporting Initiative
GTPS	Gas Turbine Power Station
HC	Hydrocarbon
H ₂ S	Hydrogen Sulphide
HRA	Health Risk Assessment
HSE	Health, Safety and Environment
HSE MS	Health, Safety and Environment Management System

HSEQ	Health, Safety, Environment and Quality
HSSE	Health, Safety, Security and Environment
ICDO	International Civil Defence Organization
ISO 14001	Internationally accepted standard that sets out requirements for putting in place an effective Environmental Management System
JOC	Joint Operating Committee
JSC	Joint Stock Company
KATS	Karachaganak-Atyrau Transportation System
KOGCF	Karachaganak Oil and Gas Condensate Field
KOGOA	Kazakhstan Oil & Gas Operators Association
KOTS	Karachaganak-Orenburg Transportation System
KPC	Karachaganak Processing Complex
KPI	Key Performance Indicator
KPO	Karachaganak Petroleum Operating B.V.
kt	kiloton
KZT	Kazakhstan tenge
Level I Incident:	An event that can be dealt with on site or at a location by the On-Scene Commander and / or Incident Control Team with their resources.
Level II Incident:	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 III Incident:	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.
LLC	Limited Liability Company
LMP	Liquid Mud Plant
LNG	Liquefied Natural Gas
LTi	Lost Time Incident
LTI	Lost Time Injury
LTIF	Lost Time Injury Frequency
LTP	Liquid Treatment Plant
LWDC	Lost Work Day Case
Mboe	Millions of barrels of oil equivalent
MERP	Medical Emergency Response Plan
MoU	Memorandum of Understanding

GLOSSARY

MPC	Maximum permissible concentrations
Mscm	Million standard cubic metres
MTC	Medical Treatment Case
NC	National Company
NCO	Non-commercial organisation
NCOC	North Caspian Operating Company
NGO	Non-governmental organisation
OBM	Oil based mud
OGP	Orenburg Gas Plant
OGP	Oil and gas producers
OHH	Occupational Health and Hygiene
OHSAS 18001	Internationally recognised assessment specification for occupational health and safety management systems
OPITO	Offshore Petroleum Industry Training Organization
OPS	Oil Pumping Station
PEC	Production Environmental Control
P&M	Production & Maintenance
PQ	Preliminary Questionnaire
PSIM	Process Safety & Integrity Management
RKI	Rotary Kiln Incinerator
RoK	Republic of Kazakhstan
RWDC	Restricted Work Day Case
scm	standard cubic metres
SO ₂	Sulphur dioxide
SPZ	Sanitary Protection Zone
TCC	Thermo-Mechanical Cuttings Cleaning facility
tcf	Trillion cubic feet
TCO	Tengiz Chevroil
TEP	Total Estimated Price
TRI	Total Recordable Incident
TRIF	Total Recordable Injury Frequency
UAE	United Arab Emirates
USD	United States Dollars
VOT	Volatile Organic Compound
WKO	West Kazakhstan Oblast
WKO ZhCED	WKO Zhaik Caspian Environment Department
YTD	Year to Date

FEEDBACK

We are grateful for your time and attention. Your feedback or comments will be appreciated - they will help us in improving our performance and will give you an opportunity to make your contribution to the Sustainability Report 2013.

KPO SUSTAINABILITY

Email: sustainability@kpo.kz

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