## **KPO SUSTAINABILITY METRICS**

Parameter / Indicator	GRI disclosure	Unit of meas.	2020	2019	2018	2017	2016
Parent Companies' shares	NA						
Eni		%	29.25	29.25	29.25	29.25	29.25
Shell		%	29.25	29.25	29.25	29.25	29.25
Chevron Corporation		%	18	18	18	18	18
LUKOIL		%	13.5	13.5	13.5	13.5	13.5
NC KazMunayGas		%	10	10	10	10	10
Parent Companies' Investment by year end	201-1	bln USD	27	26	24.4	23.2	21.9
Taxes and payments to RoQ Government (Extractive Industries Transparency Initiative)		bln USD	0.971	1.6	1.9	0.746	0.369
Aggregate investment into social infrastructure of West Qazaqstan Oblast		bln USD	427	400	368	343	311
Overall KPO's Local Content share in goods, works and services		bln USD	8.29	7.7	7	6.5	6.1
OPERATIONS	102-2						
Estimated proved reserves & production	0G-1						
Liquid hydrocarbons		bln barrels	13.6	13.6	13.3	13.3	13
Gas		Trln cubic feet	59.4	59.4	60.23	60.23	57
Recovered		%	13	13	12	12	12
Production	102-2, 102-7						
Total Production		Mboe	143.9	137.9	147.5	145.8	139.7
Total equivalent stable oil		Kt	10,941	10,147	10,953	11,247	10,466
Total gas production		Mscm	20,214	18,614	18,913	18,924	17,659
Gas Injection		Mscm	10,362	8,710	8,589	9,289	8,040
Sweet Gas (used for internal needs)		Mscm	761	685.4	723.6	739.5	605.4
Electrical power supply to West Qazaqstan Oblast	203-1	KWh	296.93	330.26	305.06	307.64	294.1
Sales	102-2, 102-7						
Total Sales		Mboe	139.4	134.7	143.5	142.3	137
Stable Liquids		kt	10,857	10,160	10,365	10,715	9,697
Unstable Liquids (from 2019 deliveries to JSC Condensate only)		kt	24	9.9	615	657	898

ECONOMICAL IMPACT

Parameter / Indicator	GRI disclosure	Unit of meas.	2020	2019	2018	2017	2016
Raw Gas to Orenburg Gas Plant		Mscm	8,986	9,113	9,493	8,782	8,934
Sweet Gas as energy to the WQO community		Mscm	90	89	95	97.7	50.8
Drilling	102-7						
Total well stock		number	467	466	462	441	412
Producing wells		number	114	110	114	115	119
Re-injection wells		number	19	18	17	17	17
Wells brought in production		number	4	4	5	5	7
Drilling rigs in operation		number	1	1	2	2	3
Turnover (shutdown)							
KPC		coverage	partial	full	partial	partial	full
Unit 2		coverage	partial	full	partial	partial	full
Unit 3		coverage	full	full	full	full	full
KOTS network		coverage	partial	full	partial	partial	full
OCCUPATIONAL HEALTH & SAFETY							
Safety	GRI 403-9						
Lost Time Incidents (LTI)		frequency	0.06	0.06	0.29	0.08	0.17
Road Traffic Incidents (RTI)		frequency	0	0.02	0.03	0.05	0.02
Total Recordable Incident Frequency (TRIF)		frequency	0.18	0.28	0.5	0.11	0.24
Fatality Frequency		frequency	0	0	0.04	0	0
Occupational health	403-10						
Absenteeism rate		frequency	736	691	718	713	605
Occupational diseases		frequency	0	0	0	0	0
Loss of Primary Containment	OG-13, 403-2						
Tier 1		number	0	0	1	2	0
Tier 2		number	1	1	0	1	2
Tier 3		number	17	14	15	8	18
Significant spills	306-3	number	0	0	0	1	0

Parameter / Indicator	GRI disclosure	Unit of meas.	2020	2019	2018	2017	2016
Analysis of HSE Cards by type of observation	102-11, 103-3, 403-2, 403-4						
Hazard		number	10,856	13,782	12,387	10,777	6,892
Good practice		number	10,357	9,793	10,804	6,698	4,434
Suggestion		number	1,806	2,242	2,108	1,263	610
Unsafe act/behaviour		number	2,559	3,525	3,376	2,634	1,669
Near miss		number	27	61	27	23	22
Emergency response	103-3						
Integrated Emergency Response Exercises (I,II,III levels)		number	2	2	3	6	1
Emergency Response Exercises (III level)		number	2	0	0	0	0
Emergency Response Exercises (II level)		number	1	5	5	2	2
Emergency Response Exercises (I level)		number	80	129	126	126	125
Security	103-2, 103-3						
Illegal tapping		number	0	0	0	0	0
Training on Human Rights and Security Principles for security contractors	410-1	% of staff	100	100	100	100	100
COMPLIANCE & GRIEVANCES	!				!	<u>.</u>	
Code of Conduct & Anti-corruption awareness training	205-2	%	99	99	95	89	77.4
Employee grievances & applications	102-17, 103-2, 103-3	number	102	99	37	27	35
EMPLOYEES							
Employees based on geographical location	102-8, 103-1						
Aksai		%	93.9	93.4	94	94.2	94.8
Uralsk		%	4	4.5	4	3.8	2.8
Nur-Sultan		%	0.6	0.6	0.8	0.8	0.9
Bolshoi Chagan		%	0.9	0.9	0.6	0.6	0.9
Atyrau		%	0.6	0.6	0.6	0.6	0.6
Number of employees	102-7, 102-8	number	4,368	4,532	4,493	4,421	4,339
Nationals		number	4,133	4,202	4,140	4,056	4,039
Expats		number	235	330	353	365	300

KARACHAGANAK

SUSTAINABILITY REPORT 2020

Parameter / Indicator	GRI disclosure	Unit of meas.	2020	2019	2018	2017	2016
Employees by type of employment	102-8						
KPO direct employees		number	3,063	3,137	3,130	3,134	3,156
Staff hired via local agencies		number	1,070	1,065	1,010	922	883
Parent Companies' staff		number	232	325	345	344	255
Staff hired via expatriate agencies		number	3	5	8	21	45
Employees by gender	102-8						
Men		number	3,148	3,277	3,261	3,222	3,131
Women		number	1,220	1,255	1,232	1,199	1,208
Local employees by age	401-1						
Between 20-30		number	431	437	458	486	793
Between 30-40		number	1,627	1,573	1,553	1,534	1,360
Between 40-50		number	1,153	1,099	1,074	1,040	1,055
Between 50-60		number	1,007	964	938	890	789
Above 60		number	179	129	60	106	42
Dynamics of local staff turnover	401-1	%	1.1	1.7	1.8	2.7	1.9
Released employees		number	167	179	135	148	165
Newcomers		number	97	244	221	166	118
Temporary employees	102-8	number	120	138	125	91	84
Voluntary dissolution of employment		number	43	42	24	45	18
Local Content in staff	202-2, 103-3						
Management		%	83	79	77	76	80
Professional and supervised workers		%	97	96	95	95	96
Personnel trained at certified programmes of International Qualifications	404-2						
CIPS International diploma, the certified programme of Chartered Institute of Procurement and Supply		number	10	15	11	16	51
Emergency response training course MEMIR by OPITO standard		number	0	19	43	43	47
Well control/well pressure control during gas, oil and water shows (IWCF)		number	13	59	39	44	32
Non-destrucitve testing certification (NDT)		number	3	33	30	9	25
International certificate in health, environment and safety (NEBOSH)		number	12	11	0	12	0

Parameter / Indicator	GRI disclosure	Unit of meas.	2020	2019	2018	2017	2016
OPITO Expert competency assessment		number	0	15	0	0	0
Certified internal auditor (CIA)		number	3	2	0	0	0
International Financial Reporting Certification (ACCA)		number	3	0	0	0	0
API Technical Standards Certification (American Petroleum Institute)		number	6	0	0	0	0
Master of Business Administration		number	1	0	0	0	0
Average number of training hours per course completed by nominated employees	404-1	average hours					
Professional courses		average hours	59.32	42.96	33.64	37.4	43.8
Language courses		average hours	42.89	55.49	62.62	62.9	40
Certified programmes		average hours	412.99	43.49	32.09	27.9	27.2
Technical & HSE courses		average hours	12.99	12.79	6.62	6.7	6.7
KPO Scholarship Programme	404-2	USD	37,639	82,332	97,969	104,000	74,346
Employees		number	9	19	20	20	15
Employees children		number	20	39	37	40	31
Total		number	29	58	57	60	46
Trainees	102-44						
Students Placement Programme		number	106	313	299	363	485
Youth Placement Programme		number	1	33	20	10	10
Employed		number	2	6	10	0	0
ENVIRONMENTAL PERFORMANCE							
Expenses for implementation of the Environmental Protective Measures Plan	103-2, 102-44	thous. KZT	11,580,444	9,677,175	7,604,066	9,418,997	6,294,270
within the Karachaganak Field		bln KZT	11.06	9.64	7.6	9.39	6.26
on the KPC-Bolshoi Chagan-Atyrau export condensate pipeline (Western Qazaqstan)		mln KZT	362.5	11.12	9.3	13.4	9.5
on the KPC-Bolshoi Chagan-Atyrau export condensate pipeline (Atyrau Oblast)		mln KZT	157.5	22.4	26.25	20.59	26.7

KARACHAGANAK

SUSTAINABILITY REPORT 2020

Parameter / Indicator	GRI disclosure	Unit of meas.	2020	2019	2018	2017	2016
Gas utilization	OG-6	%	99.92	99.91	99.94	99.92	99.84
Delivery to Orenburg Gas Plant		%	44.45	49.19	50.19	46.41	50.59
Gas injection		%	51.26	47.02	45.41	49.09	45.53
Fuel gas		%	4.21	3.70	4.33	4.42	3.71
Flared associated gas		%	0.08	0.09	0.06	0.08	0.16
Flared associated gas		mln m³	15.27	16.76	11.95	15.61	28.63
Air emissions	305-7						
Permitted volumes of pollutants' emissions		tonnes	17,527	18,544	19,986	26,538	21,876
Actual volumes of pollutants' emissions		tonnes	7,591	7,597	7,759	8,569	11,421
Emissions rate per unit of production		tonnes per 1k tonnes of produced HC	0.26	0.29	0.28	0.31	0.44
Total GHG emissions	305-1	tonnes of CO <sub>2</sub> equivalent	1,821,604	1,870,324	1,893,447	1,928,700	1,870,041
Specific GHG emissions (CO <sub>2</sub> +CH <sub>4</sub> +N <sub>2</sub> O (CO <sub>2</sub> e))	305-4	tonnes per 1k tonnes of produced HC	62	64	69	69	72
Specific GHG emissions (CO <sub>2</sub> ) IOGP international data		tonnes per 1k tonnes of produced HC	123	130	130	133	129
Specific GHG emissions (CO <sub>2</sub> ) IOGP European data		tonnes per 1k tonnes of produced HC	88	84	83	83	88
Reduction of GHG emissions	305-5	tonnes of CO <sub>2</sub>	251	464	307	447	337
GHG reduction using High pressure separator		tonnes of CO <sub>2</sub>	10	367	236	364	278
Energy consumption	302-1	tonnes of coal equivalent	1,067,135	1,021,946	1,040,603	1,051,285	971,700
Fuel gas		tonnes of coal equivalent	1,063,251	1,018,625	1,037,274	1,048,142	967,129
Electric power		tonnes of coal equivalent	767	891	825	848	1,333
Diesel fuel		tonnes of coal equivalent	1,498	932	1,058	911	1,811
Gasoline		tonnes of coal equivalent	220	249	271	316	291
Heating		tonnes of coal equivalent	1,399	1,249	1,175	1,068	1,136
Water consumption	303-3	m³	470,601	527,853	515,141	538,464	468,939
Technical water		m³	388,172	434,397	420,777	447,774	378,854
Potable water		m³	82,429	93,456	94,364	90,690	90,085

Parameter / Indicator	GRI disclosure	Unit of meas.	2020	2019	2018	2017	2016
Effluents							
Discharge of treated wastewater	303-2	m³	761,119	701,128	735,152	649,197	481,709
Reuse of treated wastewater	2016 303-3	m³	18,313	38,545	18,241	50,476	48,023
Discharged wastewater with contaminants	303-4						
_imit for discharges		tonnes	54,244	66,653	76,802	57,281	57,279
Actual discharges		tonnes	46,006	39,683	42,280	32,933	17,097
Within the MPD Limits		tonnes	45,961	35,732	39,695	28,791	16,940
Excess discharge		tonnes	45	3,951	585	4,142	157
Naste generated	306-3						
Non-hazardous waste		tonnes	2,717	2,955	5,064	1,597	840
Hazardous waste		tonnes	29,378	53,482	44,916	52,293	31,944
Naste generated, treated, lisposed & recycled	306-3, 306-5						
Waste incinerated		tonnes	772	955	737	930	722
Vaste treated		tonnes	18,247	31,610	27,218	26,225	32,949
Waste reused and recovered to process stream		tonnes	2,762	6,256	5,979	6,411	4,558
Disposed and buried at waste disposal facilities		tonnes	12,665	27,843	22,547	25,349	55,252
Waste handed over to the third party for further recycling, use, incineration and burial		tonnes	5,500	6,929	6,591	4,681	4,520
Waste accumulated at the end of year		tonnes	341,419	340,781	323,328	309,676	291,459
SOCIAL PERFORMANCE AND ECONOMIC IMPACT							
Community engagement	103-2						
Public hearings		number	4	10	10	9	7
/illage Councils meetings		number	10	6	13	3	18
Community grievance			214	235	309	410	102
Gas odour complaints	103-2	number	7	17	42	11	31
Resettlement complaints (Berezovka, Bestau villages)			198	218	267	396	66
Social infrastructure			9	0	0	3	5
nvestments into Local Community Development Programmes	413-1						
Health		thousand USD	28,090	42,319	49,199	-	50,000
Education		thousand USD	3,536	-	-	_	45,000

Parameter / Indicator	GRI disclosure	Unit of meas.	2020	2019	2018	2017	2016
Charity		KZT, mln	15	0.389	25	0.15	-
Sponshorship		KZT, mln	-	98	40	35	45
Investments into Social Infrastructure in the region of presence	203-1						
Social Infrastructure Investment in WQO/Uralsk		KZT, mln	10,458	3,030	13,561	2,778	5,995
Completed social projects in WQO/ Jralsk		number	6	3	26	11	11
Social Infrastructure Investment in Burlin District/Aksai		KZT, mln	0	-	2,338	1,729	3,704
Completed social projects in Burlin District / Aksai		number	-	-	5	5	6
Local Content share in total purchases of works, goods and services	204-1						
Total purchases of works, goods and services		mln USD	586.7	683.5	474	738	1,027
Share of local content		%	59.3	57	59.6	54.14	51.6
Share of local content goods in the total scope of goods, works, and services		%	33	30	35	25	15
'Qazakhstani tenders'		number	35	32	NA	NA	NA
Number of local companies received training		number	165	7	22	16	NA
Road map on OEM localization		number	4	NA	NA	NA	NA
Supply chain	102-9						
Companies registered at KPO Vendor database		number	439	434	405	434	400
Suppliers awarded with contracts and amendments		number	500	580	564	562	599
Local vendors		number, %	410 / 80%	418 / 72%	389 / 69%	364 / 65%	360
Foreign vendors		number, %	117 / 20%	162 / 28%	175 / 31%	198 / 35%	239
Contracts for supply of goods		number	800	1,037	982	753	890
Value of contracts for goods		mln USD	180	254.1	120.1	222	152
Contracts for provision of services		number	700	658	604	224	240
Value of contracts for services		mln USD	880	889.9	1095.6	893	955