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# DATA METHODOLOGY

## Introduction

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This document sets out the main principles and methodologies we use in reporting data in our Sustainability Report.

Our methodologies generally follow industry and functional guidelines such as those set out by IPIECA (the global oil and gas industry association for environmental and social issues) or by OGP (the International Association of Oil and Gas Producers) and these are referenced in the document where relevant.

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## Section 1: The data we report

This section defines the extent of the data we report: by function, in time, and across our operations, to give a picture of what BG Group will report at any stage in the life cycle of a particular type of operation.

### 1 DATA BY FUNCTION

We report sustainability data by function, covering the functions: Environment and Climate Change, Ethical Conduct, Human Resources, Health and Safety and Social Performance. This data is published in the [Data](#) tables in our Sustainability Report.

**TABLE 1: DATA BY FUNCTION**

By function						
KPIs	Climate Change	Environment	Ethical Conduct	Human Resources <sup>1</sup>	Health and Safety	Social Performance
1	Total (Scope 1, Scope 2, and Scope 3) greenhouse gas (GHG) emissions	Non-GHG	Number of whistleblowing cases	Employees and contractors worldwide	Number of fatalities (employee and contractor)	Total social investment
2	Scope 1 GHG emissions <sup>2</sup> and emissions intensity	Energy use	Cases with actions against individuals	Employees employed outside the UK	Total recordable case frequency (employee, contractor and total workforce)	Voluntary social investment <sup>3</sup>
3	Scope 2 <sup>4</sup> GHG emissions and emissions intensity	Waste disposal		Employees working away from home country	Lost time injury frequency (employee, contractor and total workforce)	Mandatory social investment
4	Methane emissions	Water disposal and water withdrawal	Number of completed Fraud and Bribery e-learning (employee and contractor)	Employee turnover	Occupational illness frequency (total workforce)	
5	Equity share GHGs	Discharges to sea		Women in workforce		

<sup>1</sup> Reported as 'People' in our [Data](#) tables.

<sup>2</sup> Emissions are shown by source, by type of GHG and by business segment. Emissions intensity is also shown.

<sup>3</sup> Includes charitable donations/philanthropy, local community investment, regional development and miscellaneous. These amounts are broken down in our [Data](#) tables.

<sup>4</sup> Emissions are shown by source and by business segment. Emissions intensity is also shown.

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<b>By function</b>						
KPIs	<b>Climate Change</b>	<b>Environment</b>	<b>Ethical Conduct</b>	<b>Human Resources<sup>1</sup></b>	<b>Health and Safety</b>	<b>Social Performance</b>
6	Gas flared	Spills		Percentage of women in senior leadership positions		
7				Graduates recruited during the year from the UK and from overseas		
8				Graduate retention rate		

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## Note 1: Employee and Contractor Data

Employee and contractor data is reported both by Human Resources (HR) and by Health and Safety (H&S).

HR publishes data on employees and on contractors (Category 1 and Category 2). Category 1 contractors are those filling a substantive role for more than a month, and Category 2 contractors are personnel engaged to deliver a defined scope of work typically for less than one year. In both these cases, we are involved in the selection of individuals. Category 3 contractors, a much larger part of the workforce, are engaged as part of an outsourced service contract and BG Group is not involved in selection.

**TABLE 1A: THE HR DATA WE COLLECT: EMPLOYEES AND CONTRACTORS<sup>5</sup>**

Type of contract	BG Group employees <sup>6</sup>	Category 1 Contractors <sup>7</sup>	Category 2 Contractors <sup>8</sup>	Category 3 Contractors
Source of data	SAP headcount and HR records for non-SAP entities	SAP headcount and HR records for non-SAP entities	SAP headcount and HR records for non-SAP entities	Outside our boundary

Our Health and Safety reporting focuses on our responsibility for the health and safety of employees. It reports hours worked for all types of contractors, wherever their health and safety falls under BG Group responsibility.

Due to the number and fluctuation of Category 3 contractors, we do not report a total workforce number. The total workforce can be approximately estimated by dividing total hours by 2000 (typical hours worked annually per person).

**TABLE 1B: THE H&S DATA WE REPORT: EMPLOYEES AND CONTRACTORS**

Hours worked by type of contract	BG Group employees	Mode 1 Contractors <sup>9</sup>	Mode 2 Contractors <sup>10</sup>	Mode 3 Contractors <sup>11</sup>
Source of data	H&S system	H&S system	H&S system	Outside our boundary

<sup>5</sup> Data covered by the HR reporting software system, SAP.

<sup>6</sup> An employee is someone directly employed by the company, regardless of hours worked or basis (e.g. part time).

<sup>7</sup> A contractor in a substantive role for more than 1 month (a headcount position).

<sup>8</sup> A contractor working on a defined project, typically for less than a year.

<sup>9</sup> Mode 1 Contractors are those working under our HSSE management system. Definitions of contractor categories are taken from OGP (Health and Safety Data Reporting Systems Users' Guide [www.ogp.org.uk](http://www.ogp.org.uk)).

<sup>10</sup> Mode 2 Contractors are those working under the contractor company's HSSE management system, but where we assure the effectiveness of the controls and conduct assurance.

<sup>11</sup> Mode 3 Contractors are those working under their own HSSE management system with no interface with our HSSE management system (e.g. an equipment manufacturer).

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## 2 DATA LIFE CYCLE: WHEN WE REPORT

We start reporting data from different stages in the life cycle of our operations, depending on when we have control over the operations and the data. The diagram below shows which principal activities<sup>12</sup> are covered by functional data sets.

**TABLE 2: WHEN WE REPORT**

Our principal activities: life cycle of BG Group operations							
Functions	Create	Assess	Select	Define	Execute	Operate	Decommission
Climate change					X	X	X
Environment					X	X	X
Ethical Conduct	X	X	X	X	X	X	X
HR	X	X	X	X	X	X	X
H&S	X	X	X	X	X	X	X
Social Performance		X	X	X	X	X	X

### 2.1 DATA FROM ACQUISITIONS OR DIVESTMENTS: ESTIMATED DATA

We report data from acquisitions or divestments from the date of purchase or until the date of divestment, unless otherwise specified. Where appropriate systems and processes do not exist in acquired businesses and have to be designed and implemented, we report data as soon as practicably possible.

Where we are unable to get accurate data and have made estimates or extrapolated from existing data, we make this clear.

<sup>12</sup> See 2014 [Annual Report and Accounts](#), for an explanation of BG Group Principal Activities and [How we manage sustainability](#) for how our sustainability actions are mapped against our principal activities.

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## 3 DATA BY GEOGRAPHY

The extent of our data reporting in a particular geographic area depends on the nature of the operation, whether it is wholly or partly owned, and whether we are the operator (have control). This also varies depending on the type of data. For H&S, we report where we have the ability to direct or influence performance, whereas for GHG reporting, this depends on our ownership of the operation producing the emissions. The table below sets this out in more detail.

**TABLE 3: WHERE WE REPORT: DATA REPORTING BY BG GROUP OPERATION WORLDWIDE**

**Notes:**

- 1) Speak Up (whistleblowing) data is not included in this table as this can be reported from any location, either within or outside BG Group.
- 2) For office locations only, or for those where activity is in exploration phase only, data may be minimal.
- 3) The [BG Group Data Book](#) gives more details of our operations by country.

	H&S <sup>13</sup>	Environment <sup>14</sup>	GHGs <sup>15</sup>	HR <sup>16</sup>	Social Investment <sup>17</sup>
<b>AREAS OF PALESTINIAN AUTHORITY</b>				Yes	
Office only	Yes	Do not report	Do not report		No activity
<b>ARUBA</b>				No	
Non-operated exploration	Do not report	Do not report	Do not report		No activity
<b>AUSTRALIA</b>				Yes	
Offices and operated activities	Yes	Yes	Yes		Yes <sup>18</sup>

<sup>13</sup> H&S reporting is driven by the extent of our control over operations, so we report where we have responsibility for health and safety. We report 100% of H&S data from facilities where we are the operator or the 50% joint operator, as well as where we have a position of influence (notably Dragon and ELNG).

<sup>14</sup> For environment, we report 100% of data where we are the operator and 50% of the data where we are joint operator. This includes Scope 1 and 2 GHG data. We report from offices with over 100 people and/or from those sites capable of influencing and monitoring key environmental aspects.

<sup>15</sup> In line with the GHG Protocol reporting convention, we additionally report Scope 1 and 2 GHG emissions from facilities where we have an equity share, in proportion to that equity share and regardless of operatorship. We report from offices with over 100 people and/or from those sites capable of influencing and monitoring key environmental aspects.

<sup>16</sup> HR reporting covers all BG Group employees (see Note 6 for definition), wherever they are based. HR data is collected at country level. In general, employees will be working in operated activities, unless seconded. In addition to the countries listed in this table, the HR function additionally reports data from Korea, Russia and Japan, where BG Group has a minimal presence.

<sup>17</sup> We report spend on social investment programmes funded by BG Group businesses. We also report social investment spend by joint-venture operations in which we have an equity share, in line with that share. For example, we report 50% of social investment by MGL in India, in line with our 50% equity shareholding in MGL. (In some countries, notably the US and Kazakhstan, we will report two types of spend: 100% of spend on programmes run from our own businesses, and our equity share of spend on programmes run by the joint venture operations (EXCO Resources and KPO respectively) in which we have a shareholding.

<sup>18</sup> See the note to Table 6 for an explanation of which data we report from Australia, as the data boundary is different here.

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	H&S <sup>13</sup>	Environment <sup>14</sup>	GHGs <sup>15</sup>	HR <sup>16</sup>	Social Investment <sup>17</sup>
<b>BOLIVIA</b>				Yes	
Office and operated activities	Yes	Yes	Yes		Yes
Non-operated activities	Do not report	Do not report	Equity share (various)		No activity
<b>BRAZIL</b>				Yes	
Offices and operated activities	Yes	No	No		Yes
Non-operated activities	Do not report	Do not report	Equity share (various)		Do not report
<b>CANADA</b>				Yes	
Office	Yes	Do not report	Do not report		Yes
<b>CHILE</b>				No	
Office	Yes	Yes	Yes		No activity
Non-operated activities (Quintero) <sup>19</sup>	Do not report	Do not report	Equity share		No activity
<b>CHINA</b>				Yes	
Office	Yes	Yes	Yes		No activity
<b>COLUMBIA</b>				No	
Non-operated exploration	Do not report	No	No		Equity share
<b>EGYPT</b>				Yes	
Operated (Rashpetco)	Yes	Yes	Yes		Yes
Non-operated activities (ELNG)	Yes	Do not report	Equity share		Equity share
<b>EQUATORIAL GUINEA</b>				Yes	
Office	Do not report	Do not report	Do not report		Yes
<b>HONDURAS</b>				Yes	
Office and exploration activity	Yes	Yes	Yes		No activity

<sup>19</sup> We divested from Quintero in September 2013.

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	H&S <sup>13</sup>	Environment <sup>14</sup>	GHGs <sup>15</sup>	HR <sup>16</sup>	Social Investment <sup>17</sup>
<b>INDIA</b>				Yes	
Head office and operated activities (EPIL)	Yes	Yes	Yes		Yes
Non-operated activities (MGL)	Do not report	Do not report	Yes – equity share (various)		Equity share
<b>KAZAKHSTAN</b>				Yes	
Operated (office only)	Yes	Do not report	Do not report		Yes
Kazakhstan j-v (KPO)	Yes	Yes (50%) <sup>20</sup>	Yes (50%)		Equity share
Non-operated activities (CPC)	Do not report	Do not report	Equity share		No activity
<b>KENYA</b>				Yes	
Office and exploration activity	Yes	Yes <sup>21</sup>	Yes <sup>22</sup>		Yes
<b>MEXICO</b>				Yes	No activity
Office	Do not report	Do not report	Do not report		
<b>MYANMAR</b>				Yes	No activity
Office and exploration activity	Do not report	No	No		
Non-operated exploration activity	Do not report	No	No		
<b>SINGAPORE</b>				Yes	
Office only	Yes	Do not report	Do not report		No activity
<b>TANZANIA</b>				Yes	
Office and operated activities	Yes	Yes	Yes		Yes
Joint-venture (Tanzania LNG)	Yes	No	No		Equity share
<b>THAILAND</b>				Yes	
Office	Yes	Do not report	Do not report		Yes
Non-operated activities	Do not report	Do not report	Equity share		No activity

<sup>20</sup> Reported at 50% because this is a jointly operated joint venture. We report these at 50% in line with the GHG Reporting Protocol. This avoids double counting where a venture is jointly owned.

<sup>21</sup> Data only reported for exploration activities.

<sup>22</sup> See note 21.



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	H&S <sup>13</sup>	Environment <sup>14</sup>	GHGs <sup>15</sup>	HR <sup>16</sup>	Social Investment <sup>17</sup>
<b>TRINIDAD AND TOBAGO</b>				Yes	
Office and operated activities	Yes	Yes	Yes		Yes
Non-operated activities	Do not report	Do not report	Equity share (various)		Equity share
<b>TUNISIA</b>				Yes	
Office and operated activities	Yes	Yes	Yes		Yes
<b>UK/NORWAY</b>				Yes	
Offices	Yes	Yes	Yes		Yes
Operated activities (included Dragon LNG <sup>23</sup> )	Yes	Yes	Yes		Equity share
Non-operated activities	Do not report	Do not report	Equity share (various)		Equity share
<b>URUGUAY</b>				No	
Office, operated activities and exploration activity	Yes	Yes	Yes		Equity share
<b>USA</b>				Yes	
Office	Yes	Do not report	Do not report		Yes
Global Shipping	Yes <sup>24</sup>	Yes	Yes <sup>25</sup>		No activity
Non-operated activities <sup>26</sup>	Do not report	Do not report	Equity share		Equity share

<sup>23</sup> Dragon LNG is classified as 'operated' for the purposes of safety reporting (see Note 13 above).

<sup>24</sup> We report data from our owned vessels.

<sup>25</sup> GHGs from chartered shipping vessels are not reported under equity share data but are included under operated emissions at 100%.

<sup>26</sup> BG Group shale gas interests in the US are now fully operated by its partner, EXCO Resources.

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## Section 2: Methodology by indicator

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This section supports and explains the Data tables in our Sustainability Report.

For each table, we set out:

- The individual indicators against which we report
- The definition of terms in the indicator, e.g. what we mean by 'waste'
- The units and/or methods we use in reporting, including the systems and calculations used to collect the data.

For some indicators, the Data tables categorise the data by source – for example, the sources of water we use. In this case, we also define these sources.

For some indicators, an additional note on disposal routes is also provided.

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## VALUING OUR ENVIRONMENT AND CLIMATE

### 1. CLIMATE CHANGE INDICATORS

#### 1.1<sup>27</sup> GREENHOUSE GAS EMISSIONS

Indicator	Definition	Sources	Units	Methods
Greenhouse gases (GHGs) <sup>28</sup>	<p>We report the following GHG emissions and use the Global Warming Potential (GWP) as below:</p> <p><math>CO_2 = GWP 1</math>  <math>methane (CH_4) = GWP 21</math>  <math>nitrous oxide (N_2O) = GWP 310</math></p> <p>GHG emissions are also expressed as carbon dioxide equivalent (CO<sub>2</sub>e)</p>	As per supplementary note 1.3 table (below)	'000 tonnes CO <sub>2</sub> e	The calculation we use to derive total GHGs from all emissions sources is: GHG (or CO <sub>2</sub> e) = CO <sub>2</sub> + (Methane * 21) + nitrous oxide * 310.
Scope 1 emissions	Direct Emissions – calculated from fuel consumptions.	As per supplementary note 1.3 table (below)	'000 tonnes CO <sub>2</sub> e	See supplementary note 1.3 table (below)
Scope 2 emissions	Indirect emissions – calculated from operational electricity purchased	Purchased electricity	'000 tonnes CO <sub>2</sub> e	We calculate indirect CO <sub>2</sub> emissions from electricity consumption by applying a country-specific default emission (grid) factor <sup>29</sup> which reflects the national profile of emissions from electricity production. (It is possible to overwrite the default emission factor, for example where the electricity source is known to be renewable.)
Scope 3 emissions	Other indirect emissions (not included in Scope 2)	End use (combustion) of product. Given the scale of emissions from end use of our product, other Scope 3 emission sources are not material	'000 tonnes CO <sub>2</sub> e	Calculated on the following basis - 100% combustion of our net production using default combustion figures from the revised IPCC Guidelines reference table 1.1 in kg CO <sub>2</sub> e/GJ (56.1 Natural Gas, 63.1 Natural Gas liquids, 73.3 Oil)
Equity share GHG emissions	We report GHG emissions from non-operated facilities in which we have an interest,		'000 tonnes	Total GHG emissions per facility are multiplied by our financial stake (%) in the facility to calculate

<sup>27</sup> Our reporting is in line with the GHG Protocol (<http://www.ghgprotocol.org/about-ghgp>). IPIECA Oil and Gas Industry Voluntary Guidance on Sustainability Reporting (2010) IPIECA/API/OGP Petroleum Industry Guidelines for Reporting Greenhouse Gas Emissions (2011) WRI/WBCSD GHG Protocol (2004).

<sup>28</sup> GHGs (carbon dioxide, methane and nitrous oxide) are reported under the heading Climate Change in our [Data](#) tables.

<sup>29</sup> Default emission factors from IEA CO<sub>2</sub> Emissions from Fuel Combustion (2011 Edition), Electricity and Heat Generation, IEA, Paris updated on an annual basis.

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## VALUING OUR ENVIRONMENT AND CLIMATE

### 1. CLIMATE CHANGE INDICATORS

#### 1.1<sup>27</sup> GREENHOUSE GAS EMISSIONS

Indicator	Definition	Sources	Units	Methods
	calculated on an equity-share basis, as well as emissions from facilities that we operate.			our equity share emissions data. This data is then summed and reported at Group level
Methane	All methane emissions to atmosphere	Fuel use, flaring, venting, fugitives, electricity generation and distribution losses (fugitives from transmission and distribution networks)	Tonnes	As in GHGs below
Direct methane emissions	Methane emitted directly to the atmosphere	Venting, fugitives (including distribution losses) but excluding methane from combustion sources	Tonnes	As in GHGs below
Gas flared	All natural gas flared reported on an operated basis	Flaring and well testing	Tonnes	As in GHGs below but for natural gas only; excludes liquids

#### 1.2 EMISSIONS INTENSITY

Indicator	Definition	Sources	Units	Methods
Emissions intensity	Emissions intensity is an indication of the efficiency of a facility. It measures the ratio of emissions per million barrels of oil equivalent (mmboe). This normalisation allows us to see whether a facility is more or less emissions-intensive, regardless of production trends  Production data is converted into mmboe using default calculation values		t/mmboe	Tonnes of emissions as reported in our environmental reporting database divided by our total production
Methane emissions as percentage of production	Total operated methane emissions by business segment divided by the total production or throughput	Fuel use, flaring, venting, fugitives, electricity generation and transmission and distribution (fugitives from T&D networks)	% of production (mmboe)	Methane emissions are converted to mmboe and then divided by gross production or throughput in mmboe for each business segment

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## 1.3 Supplementary note: Atmospheric emissions sources

We categorise both GHGs and non-GHGs by source as set out below with the units and methods used.

### ATMOSPHERIC EMISSIONS

	Sources	Units	Methods
GHGs	We categorise atmospheric emissions as arising from the following sources:	'000 tonnes	The calculation we use to derive atmospheric emissions is:
	<b>Venting</b> Intentional, passive release of gas to the atmosphere		Fuel consumption (volume) * density * emission factor <sup>30</sup> (t/tonne)
	<b>Fugitive</b> Continuous low-rate losses from system elements		Fuel consumption is calculated by source (see Source column)
	<b>Flaring</b> Disposing of waste gas or liquids by burning		Emission factors indicate typical emissions by type of gas, plant, etc. Each source category and fuel type may have specific emissions factors. While we use generic emission factors as a default, we aim to improve the accuracy of our calculations by inputting other information specific to the fuel and the plant in question, as different fuel compositions (e.g. high sulphur content) will result in different emission levels
	<b>Fuel use</b> Fuel burnt in engines, turbines and other equipment used during the extraction process, and also used by support transport and buildings consumption		
	<b>Electricity generation</b> Emissions resulting from power generation. These emissions are not included under the headings of 'Fuel use', although most (if not all) are derived from the burning of fuels in the production of electricity		Fugitive emissions are estimated using standard industry methodology <sup>26</sup> . A high-level factor may be applied at facility level based on type of facility and production volumes. More detailed calculations are also done using component level emission factors
	<b>Distribution losses</b> Continuous low rate of emissions and unplanned gas releases from distribution pipelines		

<sup>30</sup> We use emission factors supplied by the American Petroleum Institute (API) wherever they are available, in line with good industry practice. These emission factors are built into the calculations in our environmental reporting database as default values.

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## 2. ENVIRONMENT INDICATORS

### 2.1 NON-GREENHOUSE GAS EMISSIONS

Indicator	Definition	Sources	Units	Methods
Non-GHG emissions	Carbon Monoxide, nitrogen oxides, sulphur dioxide and volatile organic compounds <sup>31</sup>	See supplementary note 1.3 table above		

### 2.2 ENERGY USE<sup>32</sup>

Indicator	Definition	Sources	Units	Methods
Energy use	Direct and indirect energy use reported in energy terms. Fuel used in or by our operations is converted into energy use by fuel type (i.e. gas, oil, electricity)	The relevant sources are fuel use and electricity generation (as defined in table supplementary note 1.3 above)	GWHrs	Fuel consumption * energy equivalent factor

### 2.3 WASTE<sup>33</sup>

Indicator	Definition	Sources	Units	Methods
All waste	All solid, liquid and contained gaseous material taken offsite for treatment and/or disposal. Solid materials range from inert site and platform wastes, scrap metals, oils, sludge and chemicals to excavated material, used fittings, and general site and office wastes. Liquid wastes include, for example, any sewage and spent	We categorise waste according to the following definitions: <b>Cuttings</b> <sup>35</sup> Drill cuttings include Group I, Group II, Group III (synthetic hydrocarbons and enhanced mineral oils) and water-based mud cuttings	'000 tonnes	Facilities report data by waste type and disposal route into our environmental reporting database  Waste reporting is split at facility level into three reporting templates: operational waste, one-time (i.e. project) waste and drilling waste  Data is aggregated at Group level and reported in the <a href="#">Data</a> tables under the Environment heading

<sup>31</sup> These are reported by source category under the heading Environment in our [Data](#) tables. See below for more detail on atmospheric emissions data.

<sup>32</sup> We calculate energy use from fuel consumption and electricity purchased data. To calculate energy use we use only data relating to fuel use and electricity generation.

<sup>33</sup> We categorise waste using OGP definitions.

<sup>35</sup> Cuttings definitions have been taken from OGP guidelines. For more information refer to OGP Report 342 'Environmental aspects of the use and disposal of non-aqueous drilling fluids associated with offshore oil and gas operations' ([www.ogp.org.uk/pubs/342.pdf](http://www.ogp.org.uk/pubs/342.pdf)).

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## 2.3 WASTE<sup>33</sup>

Indicator	Definition	Sources	Units	Methods
	drilling muds that are handled offsite by a third party	<p><b>Metal</b> Inert, non-hazardous metal waste that does not pose a threat to human health or the environment</p> <p><b>General</b> Inert, non-hazardous non-metal waste that does not pose a threat to human health or the environment</p> <p><b>Hazardous</b> As a minimum, hazardous waste shall include those wastes listed in Annex I of the Basel Convention and/or those wastes that exhibit one or more of the characteristics of hazardous waste listed in Annex III of the Basel Convention. We also include any other waste defined as hazardous by local legislation</p>		
	All solid and non-aqueous liquid material disposed of directly by the Group on site, for example by re-injection, landfill, remediation and incineration <sup>34</sup>			
	All material stored on site for which the company does not have a use, for example, surplus chemicals, and waste with no identified responsible disposal route			

<sup>34</sup> Aqueous liquids such as process water, cooling water and produced water that are managed on site by discharge or reinjection are not included.

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### 2.3.1 Supplementary note: waste disposal routes

We also report waste disposed by disposal route, using the following categories:

	Definition	Units	Methods
Authorised landfill	Waste passed to a responsible third party for disposal at an authorised landfill site	'000 tonnes	Facilities report data by waste type and disposal route into our environmental reporting database. Data is aggregated at Group level and reported in the <a href="#">Data</a> tables under the Environment heading
Incineration	Includes off-site incineration with and without energy recovery	'000 tonnes	
In-situ disposal	Disposal by the Group. This includes reinjection, on-site landfill, and on-site incineration of solid waste	'000 tonnes	
Recycling/reusing	Waste that is reprocessed into usable materials or is reused in its original form	'000 tonnes	
Reporting year storage	Total waste generated during the reporting year and stored on site or at a Group-held storage facility (at the end of the reporting year)	'000 tonnes	

### 2.4 WATER

Indicator	Definition	Sources/Types	Units	Methods
<b>2.4.1 Water disposal</b>				
All disposed water	<p>We define disposed water as: water effluents discharged outside our reporting boundary to subsurface waters, surface waters, sewers that lead to rivers, oceans, lakes, wetlands, treatment facilities, and groundwater, and water evaporated inside or outside our reporting boundary</p> <p>Discharges are highly dependent on the facility design and default factors are not generally applicable. The environment in which the discharge takes place is important in</p>	<p>We report disposed water by category of the material disposed, as follows:</p> <p><b>Produced water</b> Produced water is water extracted from the subsurface with oil and gas. It may include water from a reservoir or water that has been injected into rock formations during our operations. It may also contain chemicals added during the production or treatment process</p>	'000 tonnes	<p>Water disposal data is reported at facility/platform level by our operations using the BG Group environmental reporting database</p> <p>For all discharges that need to be reported as a volume, specific density (in tonnes/m<sup>3</sup>) and oil content (using the defined unit of measure) also need to be provided when reporting into our environmental reporting database</p> <p>Oil content is reported as a % of the water by the facility and calculated by our database</p>



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## 2.4 WATER

Indicator	Definition	Sources/Types	Units	Methods
<b>2.4.1 Water disposal</b>	<p>determining the potential environmental impact</p> <p>For this reason, we specify the material type and the disposal route</p>	<p><b>Oil in produced water</b> Includes oil in process/produced water and drill cuttings</p> <p><b>Process water</b> Includes contaminated seawater, machinery space drainage and offshore processing drainage. (Cooling water is excluded on the basis that it is extracted and discharged with no chemical change)</p> <p><b>Oil in process water</b> Includes oil in process/produced water and drill cuttings</p> <p><b>Other waste oily water</b> For drilling, this includes oily residual volumes from clean-up operations</p> <p><b>Oil in other waste oily water</b> Includes oil in process/produced water and drill cuttings</p> <p><b>Associated water</b> Ground water released as a by-product of coal seam gas extraction</p>		

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### 2.4.1 Supplementary note: Disposal Routes:

We also classify disposed water according to the disposal route using the categories below:

Indicator	Definition	Units	Methods
Coastal water	Discharge into the near-shore area, for example, harbour piped outfall	'000 tonnes	Discharges are reported by material and disposal route in or corporate/global environmental reporting database
Open marine	Discharge directly into the open marine environment	'000 tonnes	
Groundwater/reinjection	Pumping of treated or untreated water into fresh/non-fresh water geological formations	'000 tonnes	Water disposed = (Volume * density) – oil content
Inland sewerage system	Discharge to public or private sewerage system, usually for further treatment before discharge to open water body	'000 tonnes	Oil content = volume * oil content
Inland surface water	Discharge to a surface water body, for example, river, stream or lake	'000 tonnes	Data sources may include flow meters (for point source discharges) and discharge quality test results
Soil water/irrigation	Discharge of water (following treatment) for use in irrigation of crops	'000 tonnes	
Evaporation	Disposal of water (or any liquid) from the system through the spontaneous transition to vapour	'000 tonnes	
Recycled/reused by a third party	Water taken by a third party for reuse or recycling, for example, in an industrial process	'000 tonnes	

## DATA METHODOLOGY

### 2.4.2 Water withdrawal

Indicator	Definition	Sources/types	Units	Methods
<b>Total water withdrawal</b>	<p>The sum of all water drawn into the boundaries of the reporting organisation from all sources. This includes water withdrawn directly by BG Group or through intermediaries (for example, water utilities) for industrial and domestic business use</p> <p>This excludes: once-through cooling water that is returned unchanged to the original source; produced water; seawater/associated water processed by reverse osmosis water units for potable and non-potable uses and water provided by another facility within the Group which has already been counted by the facility</p>	<p>We also report water withdrawal by category as follows:</p> <p><b>Desalinated associated water</b> Fresh/non-fresh water derived from associated water usually through distillation or reverse osmosis</p> <p><b>Desalinated ground water</b> Fresh/non-fresh water derived from ground water usually through distillation or reverse osmosis</p> <p><b>Ground water</b> Water withdrawn from below the ground surface, for example from water supply wells, or extraction from alluvial sands. This excludes produced and associated water</p> <p><b>Desalinated seawater</b> Fresh/non-fresh water derived from seawater usually through distillation or reverse osmosis</p> <p><b>Municipal water supplies</b> Also includes other water utilities, which may be trucked or piped</p>	'000 tonnes	<p>Facilities report water withdrawal data by source category into our environmental reporting database</p> <p>Water withdrawal is reported as a volume. Volumes will usually be based on water meter, delivery records or water bills</p> <p>Data is aggregated at Group level and reported in the <a href="#">Data</a> tables under the Environment heading</p>

# DATA METHODOLOGY

## 2.4.2 Water withdrawal

Indicator	Definition	Sources/types	Units	Methods
		<p><b>Rain water</b> Collected directly and stored by the reporting entity</p> <p><b>Reused/recycled</b> The volume of water used in more than one process, or used more than one time in a single process, that reduces the total amount of fresh water or non-fresh water withdrawal required at the site. This includes waste water reused at another of the reporting organisation's facilities. Non-fresh water includes use of flowback water from hydraulic fracturing operations. Note that the volume of water should be reported every time it is reused. For example, if we capture 20 litres of rain water and then recycle it a further 3 times, the reused/recycled figure reported is 60 litres</p> <p><b>Seawater</b> Non-freshwater used directly following extraction from the ocean</p>		

## DATA METHODOLOGY

### 2.4.2 Water withdrawal

Indicator	Definition	Sources/types	Units	Methods
		<p><b>Surface water</b> Fresh water withdrawn from the surface of the ground, for example from wetlands, streams, ponds, rivers or lakes.</p> <p>Non-freshwater includes brackish, saline and brine sources, and seawater extracted for desalination</p> <p><b>Waste water (third party)</b> Water collected from a third party, where it has been collected or produced as an unwanted by-product of a process</p>		
<b>Freshwater use</b>	Varies in accordance with local statutes and regulations. Where not otherwise defined by these, freshwater is defined as having a total dissolved solids (TDS) concentration of less than 2 000 mg/l. TDS is the total amount of mobile charged ions, including minerals, salts or metals dissolved in a given volume of water. TDS is directly related to the purity and quality of water		'000 tonnes	As above
<b>Non-freshwater use</b>	Has a TDS concentration of over 2 000 mg/l (where not otherwise defined by local regulations)		'000 tonnes	As above

## DATA METHODOLOGY

### 2.5 CONTROLLED DISCHARGES TO SEA

Indicator	Definition	Units	Methods
All discharges to sea	This covers all discharges to sea except water, which is reported separately. Discharges are highly dependent on the well type	'000 tonnes	<p>Controlled discharges to sea data are reported by offshore drilling facilities by our operations using our environmental reporting database</p> <p>Facilities report the quantity of drill cuttings and muds, and the oil content (where applicable), and our database calculates the quantity of cuttings/muds and reports separately the quantity of oil</p> <p>Data sources may include flow meters (for point source discharges) and discharge quality test results. Drilling reports are usually a good source of information for muds and cuttings discharge data</p>
Drill cuttings <sup>36</sup>	Include Group II, Group III (synthetic hydrocarbons and mineral oils), and water-based mud cuttings	'000 tonnes	<p>Facilities report drilling discharge data into our environmental reporting database. Oil content of drill cuttings is also recorded and the database calculates the quantities of oil and cuttings to report separately.</p> <p>Data is aggregated at Group level and reported in the <a href="#">Data</a> tables under the Environment heading</p>
Oil in cuttings		'000 tonnes	
Muds	Include Group I, Group II, Group III synthetic hydrocarbons, Group III enhanced mineral oils, and water-based mud	'000 tonnes	

<sup>36</sup> See note 31.

# DATA METHODOLOGY

## 2.6 SPILLS

Indicator	Definition	Units	Methods
All spills	<p>A 'spill' is an unplanned emission to atmosphere, land or water as a result of loss of containment or a planned emission that exceeds originally planned limits. Emissions include (but are not necessarily restricted to) oil, condensate, diesel, chemicals, drilling fluids and cuttings, sewage and process water</p> <p>A loss of primary containment without actual release to environment, for example a spill that is prevented from reaching the receptor by secondary containment, is classified as a 'near miss' rather than a spill. Secondary containment is an impermeable non-leaking physical barrier that is specifically designed to keep spilled materials from contacting the environment (for example, high density polyethylene liners, asphalt or concrete)</p> <p>The definition includes spills from:</p> <ul style="list-style-type: none"> <li>• Above ground and below ground facilities</li> <li>• Sabotage, earthquakes or other accidental release as a result of events outside operational control</li> <li>• Group-owned and operated transport</li> </ul>	Number	Any loss of primary containment is reported into the BG Group incident reporting database. The reporting process determines whether the spill was contained (near miss) or reached the external environment. The reporting captures the volume and type of material spilt, any oil content (from which hydrocarbon content is calculated) and also the duration of the spill
Number of hydrocarbon spills to land	Number of unplanned releases of hydrocarbons to land	Number	As above
Number of hydrocarbon spills to sea	Number of unplanned releases of hydrocarbons to sea	Number	As above
Number of hydrocarbon spills to land (of one barrel or more)	Number of unplanned releases of hydrocarbons to land greater than or equal to one barrel in volume per spill	Number	As above
Number of hydrocarbon spills to sea	Number of unplanned releases of hydrocarbons	Number	As above

## DATA METHODOLOGY

### 2.6 SPILLS

Indicator	Definition	Units	Methods
(of one barrel or more)	to sea greater than or equal to one barrel in volume per spill		
Total volume (bbls) of hydrocarbon spills to land	The total volume of hydrocarbons spilt to land in the reporting year	Bbls	As above
Total volume (bbls) of hydrocarbon spills to sea	The total volume of hydrocarbons spilt to sea in the reporting year	Bbls	As above
Number of produced water spills to land	Number of unplanned releases of produced water to land	Number	As above
Number of produced water spills to land (of one barrel or more)	Number of unplanned releases of produced water to land greater than or equal to one barrel in volume per spill	Number	As above
Total volume of produced water spills to land (m <sup>3</sup> )	The total volume of produced water spilt to land in the reporting year	m <sup>3</sup>	As above



# DATA METHODOLOGY

## RESPONSIBLE OPERATOR

### 3. ETHICAL CONDUCT INDICATORS

Indicator	Definition	Units	Methods
Speak Up/whistleblowing cases	Number of allegations or concerns raised in the reporting year under the <a href="#">Speak Up (Duty to Report) Policy</a> (either through the Speak Up external reporting facility or by one of the other methods outlined in the Speak Up Policy) or under the <a href="#">Fraud Risk Standard</a> . The cases are categorised into one of four categories: <ul style="list-style-type: none"> <li>• General workplace concerns</li> <li>• Malpractice</li> <li>• Fraud</li> <li>• HSSE.</li> </ul>	Number of recorded cases	Speak Up external reporting facility, annual case report log and internal reporting cases summary reports
Number of reported cases with actions against individuals following Speak Up investigations	Number of reported cases (closed or substantially closed in the reporting year) that have been the subject of a Speak Up investigation and as a result of which BG Group has taken action in relation to an individual (employee or contractor) <p>For employees, the action taken ranges from training requirements, disciplinary action (from formal warnings up to and including dismissals) or other appropriate action</p> <p>For contractors, action taken includes contract termination or other appropriate action</p>	Number of reported cases	Speak Up external reporting facility, case report log and internal reporting cases summary reports
Number of employees and individual contractors who have completed our Fraud and Bribery e-learning	Number of BG Group employees and individual contractors (category 1 and 2 contractors, not category 3 contractors) who completed the Fraud and Bribery e-learning in the reporting year	Number of individuals	LEARN
Graduate retention rate	Percentage of graduates hired in the past 10 years till working for BG Group	Percentage	HR Direct (HR software systems), HR records for non-HR Direct entities

# DATA METHODOLOGY

## 4. SAFETY INDICATORS

Indicator	Definition	Units	Methods
Number of fatalities	All recordable work-related fatalities	Number of fatalities	Incidents reported in our database
Total recordable case frequency (TRCF)	All recordable fatalities, lost time cases, medical treatment cases and restricted workday cases that have occurred in the workplace, reported per million working hours	Total number of recordable cases per million working hours	<p>Working hours and incidents are obtained from our operations via our incident reporting database</p> <p>Each of our operations has their own process for reporting hours worked data.</p> <p>Group Guidance states: Actual hours should be used wherever possible. If not available, estimates may be used. For onshore activities the hours worked by an individual will generally be about 2000 per year (8 hours per day x 5 days per week x 52 weeks per year). For offshore, hours should be calculated on the basis of 12 hour days. Average hours dependent on shift ratio</p>
Lost time injury frequency (LTIF)	All recordable fatalities and lost time cases that have occurred in the workplace reported per million working hours	Total number of fatalities and LTIs per million working hours	Working hours and incidents are obtained from our operations via our incident reporting database

# DATA METHODOLOGY

## 5. HEALTH INDICATORS

Indicator	Definition	Units	Methods
Reported occupational-related illness frequency	<p>Any abnormal condition or disorder, other than one resulting from an occupational injury, caused or made significantly worse by exposure to environmental factors associated with employment. It includes acute and chronic illnesses or diseases that may be caused by inhalation, absorption, ingestion or direct contact, as well as exposure to physical and psychological hazards</p> <p>Occupational illnesses are confirmed by an occupational physician or by a doctor with significant knowledge and experience of the working environment, and reported at the date the diagnosis is confirmed. All illnesses that may have an occupational element in their causation or exacerbation are reported as suspected</p>	The number of illnesses per working hours – reported per million working hours	Working hours and incidents are obtained from each operation via the BG Group incident reporting database

# DATA METHODOLOGY

## RESPONSIBLE OPERATOR

### 6. HUMAN RESOURCES (PEOPLE) INDICATORS

Indicator	Definition	Units	Methods
Our employees and contractors worldwide (reported as at 31 December, 2014)	<p>Total number of employees in country equals the number of employees or contractors working there currently</p> <p>Those working part-time, on sabbatical, or on maternity leave or other leave are each counted as one employee, or contractor</p> <p>Data categorised by employees by gender, employees working away at other BG Group locations, and employee assignees from other BG Group locations</p>	Number	HR Direct (Human Resources (HR) software system), and HR records for non-HR Direct entities
Our employees (average for the reporting year)	<p>Average number of BG Group employees for the reporting year, excluding contractors.</p> <p>Employees working part-time, on sabbatical, or on maternity leave or other leave are each counted as one employee</p>	Number	HR Direct (HR software system), HR records for non-HR Direct entities
Employees employed outside UK (average for the reporting year)	<p>Average number of BG Group employees for the reporting year on non-UK contracts</p> <p>Employees working part-time, on sabbatical, or on maternity leave or other leave are each counted as one employee.</p>	Number	HR Direct (HR software system), HR records for non-HR Direct entities
Employees working away from home country (average for the reporting year)	<p>Average number of BG Group employees on international assignment (average for the reporting year) as defined by the Company's Global Mobility Standard</p>	Number	HR Direct (HR software system), HR records for non-HR Direct entities

## DATA METHODOLOGY

### 6. HUMAN RESOURCES (PEOPLE) INDICATORS

Indicator	Definition	Units	Methods
	Employees working part-time, on sabbatical, or on maternity leave or other leave are each counted as one employee		
Turnover in workforce	Number of employees terminating employment at any point during the reporting year (for any reason) divided by total number of employees at the reporting year end	Percentage, number	HR Direct (HR software system), HR records for non-HR Direct entities
	Employees working part-time, on sabbatical, or on maternity leave or other leave are each counted as one employee		
Women in workforce	Percentage of males/females calculated by total number of men and women at the reporting year end	Percentage	HR Direct (HR software system), HR records for non-HR Direct entities
Women in senior leadership	Number of women in senior leadership, defined as one level below the Group Executive Committee (GEC) (BG Group grades A and above), excluding Executive Directors of BG Group (CEO and CFO currently), divided by total number in the senior management team at the reporting year end	Percentage	HR Direct (HR software system), HR records for non-HR Direct entities
	Typical BG Group grade A roles include Senior Vice Presidents, Asset General Managers (AGMs), heads of function and direct reports to Executive Vice Presidents <sup>37</sup> .		
	Employees working part-time, on sabbatical, or on maternity leave or other leave are each counted as one employee		

<sup>37</sup> Prior to 2013 this statistic included those in BG Group grade B and above. Typical BG Group B roles include country managers and subject matter experts.

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# DATA METHODOLOGY

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## 6. HUMAN RESOURCES (PEOPLE) INDICATORS

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<b>Indicator</b>	<b>Definition</b>	<b>Units</b>	<b>Methods</b>
Graduates recruited during the year from the UK and from overseas	Employees recruited onto the Graduate Programme in 2014 based on the employing country (UK versus non-UK)	Number	HR Direct (HR software system), HR records for non-HR Direct entities

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# DATA METHODOLOGY

## POSITIVE SOCIO-ECONOMIC IMPACT

### 7. SOCIAL PERFORMANCE INDICATORS

Indicator	Definition	Units	Methods	Exclusions <sup>38</sup>
Social investment	<p>Contributions to communities affected by/near our operations and/or disadvantaged groups in the wider society. Social investment can be either mandatory or voluntary</p> <p>The criteria for social investment are defined in full in our <a href="#">Social Performance Standard</a></p>	US dollars	<p>Returns from local operations</p> <p>Average exchange rates for the year are calculated from information provided by the BG Group tax function</p>	<p>We exclude from our reporting:</p> <ul style="list-style-type: none"> <li>• Investment in social impact assessment, mitigation or management activities</li> <li>• Marketing, sponsorship or strategic communications activities</li> <li>• Mandated contributions to government bodies for the stated purpose of social investment but where the company has no meaningful influence over the use of these funds</li> <li>• Payments made as part of legal settlements, such as compensation, fines and penalties</li> <li>• Core business activities that may have a community or social benefit, for example, payment of taxes and royalties and creation of employment</li> <li>• In-kind contributions in the form of equipment or staff time</li> </ul>
Voluntary Social investment	<u>Voluntary investment</u> is investment we choose to make over and above any mandatory investment	US dollars	<p>Returns from local operations</p> <p>Average exchange rates for the year are calculated from information provided by the BG Group tax function</p>	
Mandatory Social investment	<u>Mandatory investment</u> is required by a host government and is set out in the terms and conditions of our licence	US dollars	<p>Returns from local operations.</p> <p>Average exchange rates for the</p>	

<sup>38</sup> Australia is an exception to our usual reporting approach: see note at end of table.

# DATA METHODOLOGY

## 7. SOCIAL PERFORMANCE INDICATORS

Indicator	Definition	Units	Methods	Exclusions <sup>38</sup>
	(Before 2012, we reported 'contractual obligations through production-sharing agreements.' This included mandatory social payments to governments, over which the company had no meaningful control. In 2012, we narrowed the reporting criteria to 'mandatory social investment.' Whilst this spend is mandatory, the company has full control over how such funds are spent.)		reporting year are calculated from information provided by the BG Group tax function	

### 6. Supplementary Note: Reporting social investment in our operations in Queensland, Australia

As noted above, our Social Performance methodology normally excludes reporting spend that relates directly to impact management. However, in Queensland, Australia, as part of the conditions of our QCLNG project, some of our social investment spend is carried out under the [QCLNG Social Impact Management Plan](#) (SIMP) agreed with the Queensland Coordinator-General. This plan requires projects that are a mixture of impact management and social investment and therefore spend cannot easily be classified according to our usual methodology. We classify and report these projects as follows:

Social investment <sup>39</sup>	Projects that fully meet the voluntary social investment definition in the BG Group Social Performance Standard			100% reported
Partial social investment	Projects that have an element of impact mitigation, but deliver social benefits over and above this, consistent with the BG Group definition of social investment			50% reported
Exclusions	Projects that are designed to mitigate an impact of QGC business activities			Not reported

<sup>39</sup> The SIMP was presented to government as a voluntary package that included both impact management and voluntary social investment. The social investment commitments in the SIMP are consistent with the BG Group definition of voluntary social investment and so this spend is classified as voluntary expenditure.