BG GROUP

BG GROUP SUSTAINABILITY REPORT 2012

BG Group Sustainability Report 2012

CHIEF EXECUTIVE'S STATEMENT

Welcome to our Sustainability Report. Having taken up the role of Chief Executive at BG Group in January 2013, I am proud to introduce this report and to reinforce not only the Group's, but also my personal, commitment to sustainability.

Working sustainably has been fundamental to BG Group for many years. In the Group's 2001 Social and Environment Report, we set out our Business Principles for the first time. Today, those Business Principles are still the foundation of how we work. Applying them robustly ensures we protect our licence to operate and our ability to generate long-term value for our shareholders.

In recent years, we have seen a number of key sustainability issues come to the fore.

Managing climate change has become a mainstream issue for businesses all over the world, with the landmark Kyoto Protocol in 2005 and subsequent global commitments. Major incidents – like BP Macondo Deepwater Horizon – have, at the same time, raised awareness of the importance of managing major hazard risks. As new unconventional reserves of oil and gas are discovered, the challenge of producing energy, not only safely, but also responsibly and without long-term consequences for the environment or human health, has become critical.

At the same time, social media has given the general public a new voice, resulting in wider stakeholder interaction and, in some cases, new social and political freedoms. Human rights have become a focus of increasing attention since the development of the UN Guiding Principles on Business and Human Rights.

There is, too, greater scrutiny of public institutions, and greater expectations of ethical behaviour and transparent and comprehensive reporting. Companies, and particularly resources companies, are expected increasingly to set out in detail their responsible approach to working in a way that respects the environment and society, and to demonstrate good governance. It makes good business sense to work efficiently and to conserve resources.

Against this context, our Sustainability Report sets out our annual targets and our achievements against those targets, as well as our commitments for the future. This year's report is underpinned by more detailed research and provides new information in other key areas, such as socio-economic impact, human rights and biodiversity. More broadly, our sustainability website sets out our approach, our Business Principles, Policies and Standards, and the way we manage key sustainability issues.

In 2012 we made good progress in some key areas.

Notably, we achieved and surpassed the target published in 2007 of achieving one million tonnes of sustainable greenhouse gas (GHG) emission reductions by 2012. This was due to a range of initiatives to reduce emissions and improve energy efficiency in our operations worldwide. We also agreed a new GHG target to be effective from 2013 to 2017. This target aims to reduce the overall intensity of our GHG emissions by 10% (that is, by an average of 2% per year over the five-year period).

We agreed a new water strategy, which sets out our aspiration to achieve excellence in water management. As part of this, we will develop local water management plans in all our operations with significant water risks. We made some important investments in environmental technology for the future, including our investment in Project Blue, a high-profile ocean monitoring project in Brazil[1].

We advanced programmes to improve Group-wide energy efficiency, explore opportunities for carbon management and integration and develop awareness and knowledge of existing and new technologies for the use of gas. We also continued strategic investment in communities where we work, notably in Queensland and in Brazil. In Brazil, we set up a number of key long-term projects to build local capacity in science, technology, engineering and mathematics (STEM) while in Queensland we contributed more than $17 million in community investment and development projects during the year.

We strengthened our approach to human rights management in 2012, establishing a relationship with the Institute of Human Rights and Business and piloting indicators relating to the Voluntary Principles on Security and Human Rights initiative. We also saw our sustainability progress recognised externally. We were one of only two oil and gas companies in the FTSE350 Carbon Disclosure Leadership Index for 2012, scored 98% in the FTSE4 Good index, and were in the top 3% in the Dow Jones Sustainability index.

During the year, we also made notable investments, both financial investments and broader commitments in communities where we work, particularly in Brazil and in Australia but also in Trinidad and Tobago and the UK. Our progress with social initiatives in Egypt and Tunisia was slower, as we still faced challenges in the aftermath of the political and social changes of 2011.

We did not, however, meet our Group total recordable case frequency (TRCF) safety target in 2012 as our Queensland operations, in particular, recorded safety incidents well above our target for the year.

Improving our personal safety record, in particular contractor safety management in Queensland, continues to be a priority, with a range of new initiatives put in place during the year. We are also focused on process safety and asset integrity performance and continue to build on the good progress made in 2012.

Our major investment in Queensland is due to come onstream in 2014, while activity in the Santos Basin in Brazil will continue to build towards peak production. Our investment, in parallel, in communities and wider society is vital to our future in these and other new markets and opportunities. Building a safe, efficient and ethical culture can also help us meet the challenges of growth and bring business benefits. Embedding an energy efficiency culture, and building a brand that attracts and retains the skilled people we need to grow, are examples of ways that sustainability can help ensure our future as well as protecting our licence to operate.

For the fourth year, this report complies with the Global Reporting Initiative (GRI) reporting guidelines. BG Group is also a signatory to the UN Global Compact and we remain committed to its 10 Principles. We detail how we fulfil this commitment throughout this report and on our website, particularly in the 'How we manage' pages of the 'Sustainability at BG Group' section.

We have more work to do as we look ahead to 2013. Our commitment to sustainability lies at the heart of the Group and how we operate throughout the world. I am convinced that our efforts in this area will keep improving as we continue to place a strong emphasis, wherever we operate, on developing and maintaining a broad licence to operate, building on partnerships with all our stakeholders, from governments to local communities.

CHRIS FINLAYSON
CHIEF EXECUTIVE

[1] An R&D levy requires BG Group to invest 1% of its gross production revenue from Brazillian fields that have an obligation to pay special participation, on R&D in Brazil.

SUSTAINABILITY COMMITTEE'S STATEMENT

Sir David Manning
Chairman of the Sustainability Committee

2012 was an active year for the Committee. Among our priorities were helping to define and ensure the application of BG Group's Business Principles and contributing to and monitoring our work on stakeholder engagement. These areas are critical as we develop and consolidate our licence to operate.

Safety

Safety was a key theme during the year. We reviewed performance across the Group at regular intervals, focusing in particular on safety performance in our operations in Queensland. The Committee received a presentation from the President and Chief Operating Officer of Bechtel Corporation, the lead contractor for our Queensland Curtis LNG (QCLNG) project. This presentation highlighted steps being taken to counter the number of contractor incidents and injuries in Queensland, which affected the Group's safety performance during the year.

The Committee recognised the challenges faced to date but also the work done to improve performance in the latter part of the year, which it saw as significant progress. During 2013, the Committee will continue to monitor the safety initiatives put in place in 2012 and will look forward to seeing these in action during a planned visit to QGC in late 2013.

During September, Committee members visited Egypt as part of a wider Board visit. We discussed safety challenges and some of the successful projects undertaken to improve safety performance. We also heard from local management about the lessons learnt from the country evacuation during the 2011 revolution, and the procedures put in place as a result.

In October 2012, members of the Committee and other Board members took part in the Group's Major Accident Hazard Awareness programme at Spadeadam in Cumbria. This course is particularly effective in creating awareness of major accident hazards, their causes and effects, and the measures used in BG Group to manage the associated risks. The Committee was pleased to see that the programme was subsequently rolled out to other Group operations.

Environment

The Group set a new GHG emissions target for the period 2013-2017. The previous target of one million tonnes for the period 2007-12 was exceeded in the course of 2012.

After discussion in the Committee the Group also published, for the first time, a Public Position on Climate Change, focusing on energy efficiency.

As part of its work in the environmental area, the Committee also considered the Group's new water strategy, recognising the importance of responsible water management, and received presentations on the work undertaken in this area in Egypt and in Australia.

The debate on the environmental impact of unconventional gas, and in particular the management of fugitive emissions, continued in 2012. This was a significant factor in the Committee's review of related issues, such as the Group's approach to climate change and carbon management and its shale gas business in the USA. The Group also published in 2012 its eight operating principles for unconventional gas and the Committee will continue to monitor progress against those principles in 2013.

Licence to operate and new country entry

The Committee reviewed and endorsed the Group's overall approach to the range of political, social and environmental issues that arise when we are considering investment in new countries. In particular, it underlined the importance of early engagement with a broad range of stakeholders, in order to understand the full range of risks as well as the scrupulous application of our Business Principles. The Committee discussed how we might pursue this approach in a number of possible new countries and addressed the social and environmental aspects of a possible exploration programme in Honduras.

In February 2012, I accompanied our then Chairman, Sir Robert Wilson, and a fellow Board and Sustainability Committee member, Caio Koch-Weser, on a visit to Tanzania. This gave us the chance to assess at first hand the work being done to develop our licence to operate, while we undertake exploration offshore Tanzania with a view to a major LNG export project. We were encouraged by the work done with the local communities in the area where we are present, in the south of the country. But we were also struck by the challenges of capacity building and management of the likely macro-economic impacts of oil and gas development. The Group has done further work on these issues, including commissioning a third-party report, and the Committee will return to them in the course of 2013.

During the Board's September visit to Cairo, we were given an update on the social investment initiatives underway in Egypt. The Group's strategy is to develop a mixture of 'quick win' and longer-term strategic projects focused on education and sustainable livelihoods. The Committee recognised that the fluid political situation in Egypt had inevitably led to some delays but underlined the importance of this work. It will return to these issues in the course of 2013, both in relation to Egypt and to the Group's social investment strategy more broadly.

The Committee also reviewed strategies for managing risks and developing our licence to operate in Brazil and Kazakhstan, and reviewed the Group's work on ethical conduct, the importance of which it strongly emphasised.

Key events

The Group participated in the 2012 United Nations Conference on Sustainable Development, Rio+20. At the conference, we announced our support for Project Blue; we will be investing $9.5 million in this project to develop an ocean observation system for the Santos Basin where we operate. We also announced up to $100 million of funding support for the Brazilian government's 'Science without Borders' initiative, which will promote knowledge exchange between Brazil and leading international research institutions[1].

This report covers these and other sustainability issues in more detail.

SIR DAVID MANNING
CHAIRMAN OF THE SUSTAINABILITY COMMITTEE

[1] An R&D levy requires BG Group to invest 1% of its gross production revenue from Brazillian fields that have an obligation to pay special participation, on R&D in Brazil.

ABOUT THIS REPORT

Good practice in sustainability reporting includes identifying and reporting on 'material'[1] sustainability issues. These are environmental, social or governance issues, arising in the reporting year in question, which could have a significant impact on the business in the short or the longer term.

We aim to report fully on the material sustainability issues for our business. In 2012, we strengthened our approach to identifying and reporting on these issues, building on improvements made in 2011. We conducted more extensive internal research, including reviewing a range of internal records for the year in question (such as our risk register, the minutes of the Sustainability Committee and our internal announcements). We also interviewed and engaged internal specialists. Externally, DNV Two Tomorrows conducted third-party research which included a media review, a review of feedback from socially responsible investors and interviews with a sample of stakeholders – including investors, and representatives of relevant government departments and non-governmental organisations (NGOs). We reviewed industry sources, material from IPIECA, the global oil and gas industry association for environmental and social issues and Global Reporting Initiative (GRI) materials. From this, we were able to build a picture of the key 2012 issues for our industry and the Group.

[1] The Global Reporting Initiative (GRI) which sets a framework for sustainability reporting, describes material issues as topics that have a direct or indirect impact on an organisation's ability to create, preserve, or erode economic, environmental, and social value for itself, its stakeholders and society at large.

MATERIAL ISSUES IN 2012 – AN OVERVIEW

Here, we provide a brief summary (in alphabetical order) of the material issues for BG Group during 2012, which are then individually reported in more detail. Some of these issues are specific to BG Group and to 2012 (like Chief Executive succession). Others, like climate change and safety, are long-term management issues for all energy companies and we expect to continue to report on these on an annual basis.

Climate change

Climate change remained high on the agenda and the subject of increasing regulatory controls and emission reduction initiatives.

In 2012, we achieved and surpassed our target, published in 2007, of making a sustainable reduction of one million tonnes of greenhouse gas (GHG) emissions by 2012. We continued work to minimise our own emissions and also set a new target of reducing emissions intensity by 10% between 2013 and 2017. During 2012, we prepared for the implementation of new government carbon pricing and trading legislation in key markets and collaborated with industry partners on important issues such as fugitive emissions. We also engaged with stakeholders to develop a public position on climate change, which sets out the six key principles we follow in our approach to climate change.

Energy efficiency

Energy efficiency was a key issue during the year, as we focused on creating business as well as environmental benefit from better efficiency. We continued to carry out projects to reduce our energy consumption and losses of energy during fuel use, flaring and venting. These included initiatives across the business, with the greatest savings coming from projects in Kazakhstan and Tunisia and in our LNG shipping business. In 2012, we set targets for our operations to deliver our new GHG target. Operations will prepare energy management plans that will formalise their approach to optimising energy use. We encouraged a low-carbon culture with initiatives in our head office in Reading, in the UK, and elsewhere.

Environmental impact management

During 2012, we carried out more than 20 best available technique (BAT) assessments to ensure appropriate environmental technology was selected. Projects reducing GHG emissions by 400 000 tonnes were achieved which delivered the 2007-2012 GHG target. We carried out work towards reinstating a sulphuric acid plant in Tunisia and managed biodiversity issues in Trinidad and Tobago and Australia, where improved dredging minimised impact and saved approximately $20 million. We increased investment in environmental technologies, including making a $9.5 million investment in Project Blue, a project to develop an ocean monitoring system in Brazil[1]. We were one of only two oil and gas companies in the FTSE350 Carbon Disclosure Leadership Index for 2012. Our environmental performance also forms part of the external assessment of our sustainability performance for which we scored 98% in the FTSE4 Good index and were in the top 3 % in the Dow Jones Sustainability index.

Ethical conduct

Stakeholders' expectations of corporate ethical conduct have increased and tough legislation such as the UK Bribery Act 2010 (which came into force in July 2011) has been introduced. While we have always had a zero tolerance approach to corruption, we recognise the importance of continued vigilance.

During 2012, we carried out internal audits on how we appoint third parties including agents and intermediaries who interact with public officials. We looked specifically at ensuring that due diligence on these third parties was being fully and effectively carried out[2].

We conducted an independent review of our fraud management processes, continued to seek to influence our non-controlled joint ventures to meet high standards of ethical conduct, assessed the robustness of our anti-bribery and corruption procedures in selected operations and continued training our people in key areas. We revised and re-issued our Business Principles employee guide, Principles into Practice and launched a handbook on how to test our anti-bribery and corruption procedures. We continued to investigate reports made through Speak Up, our independent service for reporting potential breaches of our Business Principles.

Health and wellbeing

Employee health and wellbeing are key issues as the Group grows and moves into new countries across the world. We continued to build our health management resources and strengthen our processes for protecting employee health, as well as monitoring for occupational illnesses. Where appropriate, we invested in projects to facilitate certain community health services, such as the upgrade to the Nakta Heath Centre in Tunisia. We re-assessed our key global health risks and put into place a health risk management programme. We increased the numbers of dedicated medical practitioners in our operations worldwide and re-launched our Employee Assistance Programme, which offers our people 24-hour-a-day health, counselling and wellbeing support.

Human rights

Human rights have become a focus of increasing attention for businesses since the development of the UN Guiding Principles on Business and Human Rights. We strengthened our approach to human rights management in 2012, establishing a relationship with the Institute of Human Rights and Business and piloting indicators relating to the Voluntary Principles on Security and Human Rights initiative. We also played an active role in the work of IPIECA, the global oil and gas industry association for environmental and social issues, to strengthen the oil and gas industry's approach to human rights.

1 A research and development levy requires BG Group to invest 1% of its gross production revenue from Brazilian fields that have an obligation to pay special participation, on R&D in Brazil.

2 The relevant BG Group Standards are the Appointment of Agents, Intermediaries and Political Consultants Standard and our Ethical Conduct Due Diligence Standard.

New country entry and political risk management
Exploration and production opportunities arise in increasingly challenging locations. In 2012, we developed a more rigorous framework for assessing new market opportunities and introduced this to the Sustainability Committee for endorsement before it is implemented. This framework takes into account political, social, corruption and environmental risks as well as the wider geopolitical context. These risks were considered when we assessed a number of potential projects and new activities in 2012. In British Columbia, Canada, we engaged extensively with indigenous First Nation peoples. In Tanzania, we continued to build relationships with a wide range of stakeholders and established partnerships with key non-governmental organisations (NGOs). We also continued work on understanding the macro-economic impacts of oil and gas development.

People and skills for the future
Ensuring we had the right people for the future was a focus during the year. We announced the appointment of Chris Finlayson as our new Chief Executive and took a range of steps to strengthen our approach to finding and developing the people we need at all levels, in particular future leaders, including a more structured approach to identifying and developing talent. We developed a more targeted and responsive approach to surveying employees and continued training to help build leadership skills. Recognising the need to increase female representation at the senior leadership level, we developed a diversity statement and set an aspiration to increase the percentage of women in leadership positions to 20% by 2020.

Safety
Safety is always our top priority. During 2012, we developed a new safety strategy, which reflects learning from previous years as well as priorities identified in 2012. It focuses on a number of key themes, including major accident hazards, contractor management, and safety leadership and culture.

We deeply regret that there were two fatalities in our operations in 2012 and our occupational safety performance as measured by the headline indicator of total recordable case frequency (TRCF) was disappointing at 2.26 against our 2012 target of 1.35. Underlying this in particular was poor safety performance in our largely contracted Queensland workforce.

Improving personal safety performance, particularly in Queensland, and strengthening relationships with our contractors were therefore priorities during the year and we put a range of initiatives in place to address these. Major accident hazards remained a focus: we ran a Group-wide campaign to raise awareness of these hazards and continued to implement lessons arising from the BP Macondo Deepwater Horizon incident.

Security
The risk of terrorism, criminal activity, piracy and other security challenges in a range of countries continued through 2012 and will, we believe, persist. During 2012, we strengthened the protection of our LNG fleet against the risk of piracy and monitored local security situations, notably in Egypt, developing appropriate plans and responding to incidents as required. We initiated security reviews in our North Africa operations in the light of the January 2013 terrorist attack on the In Amenas gas installation in Algeria. We provided crisis management support in response to a gas leak on a non-operated North Sea platform, and identified lessons learnt. We reviewed our fraud risk management and information security arrangements.

Socio-economic reporting
Transparent reporting was a much-debated issue in 2012, with the progress of new EU proposals that will require companies to report their taxation payments, as a minimum on a country-by-country basis and, potentially, on a project-by-project basis. We participated in industry working groups on this issue and engaged with the UK government, the European Parliament and EU member states. While the debate about the best way forward continues, this report provides for the first time more information on the economic value we generate: an initial breakdown of our wage bill, social investment expenditure by country, and spending with local suppliers. We continued our support for the Extractive Industries Transparency Initiative (EITI) and provide a summary in this report of EITI reporting in countries where we operate.

Unconventional gas
Public debate about the environmental impact of unconventional gas (gas trapped in rocks such as shale) – continued during 2012. We produce gas from shale in the USA and from coal seams in Queensland. During the year, we continued to monitor and respond to stakeholder concerns, particularly in the communities where we work, while also working with regulators and industry on initiatives designed to strengthen the industry's framework and reduce its environmental impact. We made progress against our eight principles for operating in unconventional gas which we set out in a public position in 2011, and updated in 2012. Key areas of progress were: community engagement in Queensland, responsible chemicals use and emissions management in the USA, and water management in both Queensland and the USA.

Water
During the year, we agreed a new Group water strategy, building on the water management plan introduced in 2011. Our operations took a range of actions to improve water management during the year.

In Queensland, we made progress with our investment in state-of-the-art reverse osmosis plants to treat the water we produce. We reviewed our water management approach in Egypt, and in the USA, and we ran field trials of new water solutions. We worked with Texas A&M University and other partners to trial new technologies as well as participating in a US Environmental Protection Agency study looking at the potential impacts on drinking water resources from hydraulic fracturing.

Working with communities
We continued to implement our long-term strategy of managing social impacts and working with and investing in communities. We established a grievance management mechanism in our Queensland operations and are developing one in Tanzania. In Trinidad and Tobago, we delivered a programme to manage our impact on and relationship with fishing communities. We strengthened our work in science, technology, engineering and mathematics (STEM) education in Brazil and the UK and participated in Rio+20 conference sessions on STEM education partnerships. In Queensland, we launched several new programmes to create long-term employment and business development opportunities for indigenous people and to offset the impacts of our construction work by building affordable housing in Gladstone. In North Africa, implementation of the programmes we designed to respond to the issues and expectations triggered by the Arab Spring was slower than anticipated.

MATERIAL ISSUES IN 2012 – BY ISSUE

Here, we report on fourteen material sustainability issues for BG Group during 2012. Material issues are the environmental, social and governance issues that we and our stakeholders believe could have a significant impact on the business in the short or longer term.

For each issue, we set out the goals we set ourselves, the challenges we faced during 2012, our approach to these, and the important outcomes and achievements of the year. We focus here on the reporting year in question, although we also look forward and identify future goals where applicable.

We provide the longer-term context for these issues in the Sustainability at BG Group section of this website. For example, we have reported on climate change as a 2012 material issue here, and provide general background on how we manage climate change on the Our approach to climate change page.

CLIMATE CHANGE

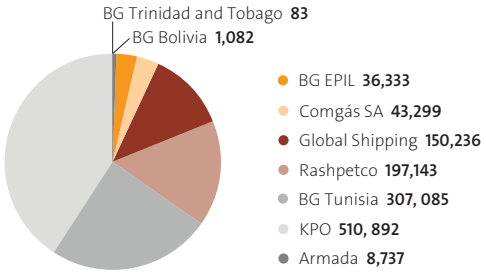
Overview
Climate change remained high on the agenda and the subject of increasing regulatory controls and emission reduction initiatives.

In 2012, we surpassed our target published in 2007, making a sustainable reduction of over one million tonnes of greenhouse gas (GHG) emissions over the target period. We continued work to minimise our own emissions and set a new target of reducing GHG emissions intensity by 10% between 2013 and 2017. During 2012, we prepared for the implementation of new government carbon pricing and trading legislation in key markets and collaborated with industry partners on key issues such as fugitive emissions. We also engaged with stakeholders to develop a public position on climate change, which sets out the six key principles we follow in our approach to climate change.

Our 2007-2012 greenhouse gas target
In 2012, we surpassed our 2007-2012 GHG reduction target. The target, which has stretched the business to achieve reductions, has cut 1.2 million tonnes of GHG emissions while delivering $50 million in annual savings, from an investment of $20 million.

Our 2013-2017 greenhouse gas target
We also agreed a new GHG target to be effective from 2013 to 2017. This target aims to reduce the overall intensity of our GHG emissions by 10% (that is, by an average of 2% per year over the five-year period).

Greenhouse gas reductions by operation



We expect to achieve this by making a 15% GHG emission intensity reduction in our LNG liquefaction business and an 8% GHG emission intensity reduction in our exploration and production business as well as through other initiatives and approaches, including:

- implementing incremental energy efficiency improvement projects: more than 200 opportunities with payback periods of less than five years have been identified;
- enhancing energy efficiency by promoting process improvements: introducing more energy efficient engineering design and new technology in new developments;
- the replacement of ageing equipment with new, more efficient equipment or technology.

In 2013, we will start work to deliver against the target. This will involve embedding energy management in our businesses by establishing appropriate key performance measures. We will also launch an awareness-raising and behavioural change programme to support improved energy efficiency.

Greenhouse gas target methodology
The new target is an intensity-based, rather than an absolute, target – that is, it aims to reduce our emissions as a percentage of our total production. This reflects the fact that our business is predicted to grow substantially over the next five years.

Our priority is not just to reduce emissions per unit of production but to establish a culture of energy efficiency;, such a culture aligns business and environmental goals, as gas that is not lost through emissions can be sold.

As we are not always the sole operator of facilities, our target is set up on an equity share basis, that is, to include emissions from joint ventures or other partnerships proportionally to our share in those ventures. We plan to work closely with our partners to improve the energy efficiency of our non-operated joint ventures, as well as of our own operations.

Managing carbon risk
Our exposure to climate change policy risk is increasing due not only to potential exposure to government carbon pricing or emissions trading regimes but also in some markets to the introduction of stringent new regulatory controls such as those governing emissions from the oil and gas industry introduced by the US Environmental Protection Agency (EPA) in 2012. We monitor any trends relating to new carbon-related regulation that might have an impact on our business and prepare accordingly.

During 2012, we prepared for the implementation of new legislation in Australia that places a price on carbon under the Clean Energy Legislative Package. In Kazakhstan, we engaged with the government on their plans for an emissions trading scheme. We also closely followed developments in the EU emissions trading scheme and the announcement to link the EU's Emissions Trading Scheme to Australia from 2015.

Our actions included:

- implementing a strategy to optimise compliance under the EU Emissions Trading Scheme by making use of links to the international carbon market
- assessing opportunities to create tradable carbon credits from emissions reduction projects in Brazil
- joining the International Emissions Trading Association (IETA) to closely monitor international, regional and national policy developments.

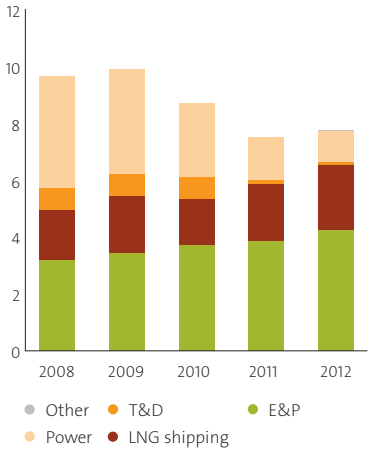
In the USA, we responded to new EPA reporting and compliance requirements relating to methane emissions from shale gas (alongside local pollutants), which come into effect in 2013 and form part of the New Source Performance Standards. These rules are to be fully reinforced by the EPA from 2015 and will require oil and gas companies to capture methane as well as pollutant gases from 2015 using specified 'green completion' technologies.

Fugitive emissions
During 2012, we saw an increased focus on the management of fugitive methane emissions, or unintentional releases of methane or natural gas, from operations. A number of reports into the gas industry in the USA in particular, highlighted concerns about levels of fugitive emissions[1]. We took steps to reduce fugitive emissions from our operations by introducing 'green completions'[2] as standard there, minimising the venting of methane from the completion process. We also participated in a major study to generate more accurate data on levels of methane emissions from natural gas production.

Greenhouse gas emissions reporting
Reporting of GHG emissions has become more widespread as more regulation has been introduced and public expectations of transparent reporting have increased. We have reported for more than a decade using the global World Resources Institute/World Business Council on Sustainable Development (WRI/WBCSD) GHG protocol which sets out how to measure and account for emissions.

We already meet new UK legislation on GHG reporting which will require all businesses listed on the main market of the London Stock Exchange to report their levels of GHG emissions from the start of the next financial year. We also report our GHG emissions as part of the voluntary Carbon Disclosure Project. Although we reported better emissions performance in 2012, changes in the scoring methodology resulted in us in receiving a lower ranking in the Carbon Performance Leadership index in 2012.

BG Group GHG emissions: by business
(million tonnes CO_2e)



Scope 1 emissions
Our Scope 1 emissions are those that arise directly from sources we own or control. They derive principally from fuel use, flaring, venting, fugitive losses (leaks or other irregular emissions of gases from equipment) and distribution losses.

In 2012, operations directly under our control emitted 7.7 million tonnes of GHG, an increase of around 200 000 tonnes, or 3%, compared with 2011. Our equity share emissions were 9.6 million tonnes of GHG, a decrease of one million tonnes, or approximately 10% compared with 2011.

[1] For example, the National Resources Defence Council report, "Leaking Profits" (March 2012) which highlights the cost savings as well as environmental benefit, available by reducing fugitive emissions.

[2] 'Green completion' is a term used in some markets to describe methods or technologies that reduce methane losses during well completions. When a new well is being constructed, it has to be cleaned before it starts to produce – and gas produced during this process is normally vented to the atmosphere. Green completions use portable equipment to capture this gas and typically recover more than half of the total gas produced. This gas may then be sold, reused or flared. In using this approach, investment can typically be recovered within two years. Some US states and cities require green completions and some oil and gas companies already voluntarily use them. The EPA estimates that mandatory green completions in the US will point to a cost saving of $11-19 million in 2015 when the rules are fully implemented.

Scope 2 emissions
Our only significant source of Scope 2 emissions (indirect emissions that arise from the consumption of purchased electricity, heat or steam) is electricity. We calculate indirect GHG emissions from electricity consumption by applying country-specific emission factors (reflecting the average GHG emissions per unit of electricity produced on a country-by-country basis) to electricity purchased.

In 2012, businesses directly under our control purchased electricity that emitted 20 000 tonnes of GHG when originally generated at source. This compared with emissions of 19 000 tonnes in the previous year[1]. Overall, our total Scope 1 and 2 emissions grew by 3%.

Scope 3 emissions
We also report an estimate of our Scope 3 emissions (indirect emissions associated with activities outside our direct control). The use by our customers of the oil and gas we produce is by far the largest source of our Scope 3 emissions and other emissions (for example, those associated with employee travel) are minor by comparison. We estimate that Scope 3 emissions associated with the use of the fuel we supply were90 million tonnes in 2012, compared with 87 million tonnes in 2011.

We are investing in technologies related to more efficient use of gas – for example, investing in how gas can be used more effectively in transport and fuel cells to develop efficient local sources of electricity and heat. We do not engage directly with our customers on Scope 3 emissions because we do not have a retail business and do not sell directly to end users.

Stakeholder engagement on climate change
During 2012, we engaged regularly with governmental and industry advisory panels on the subject of climate change policy and scientific issues.

For example, we shared with the UK government our analysis of the most effective, realistic and low-cost route for the UK to meet its 2020 decarbonisation targets.

This involved written submissions in response to government policy documents and a series of meetings with Ministers and senior officials in the Prime Minister's office, HM Treasury and the Department of Energy and Climate Change.

We also engaged with National Grid, the organisation tasked with the delivery of the framework for a reformed electricity market in the UK.

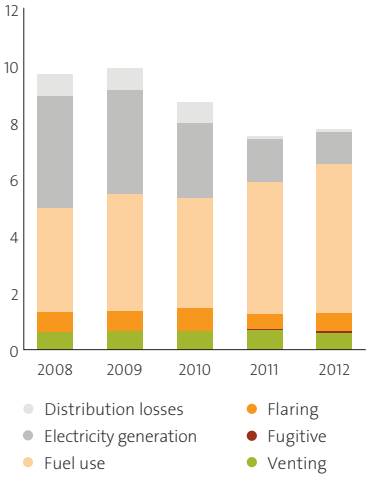
We contributed to industry submissions to the European Directorate General for Energy in Brussels, addressing decarbonisation and security of energy supply issues. We advocated the multiple benefits of gas as a low-carbon energy source.

In the process of developing our public position on climate change we engaged with a variety of stakeholders including non-governmental organisations (NGOs), governments, investors and specialist organisations.

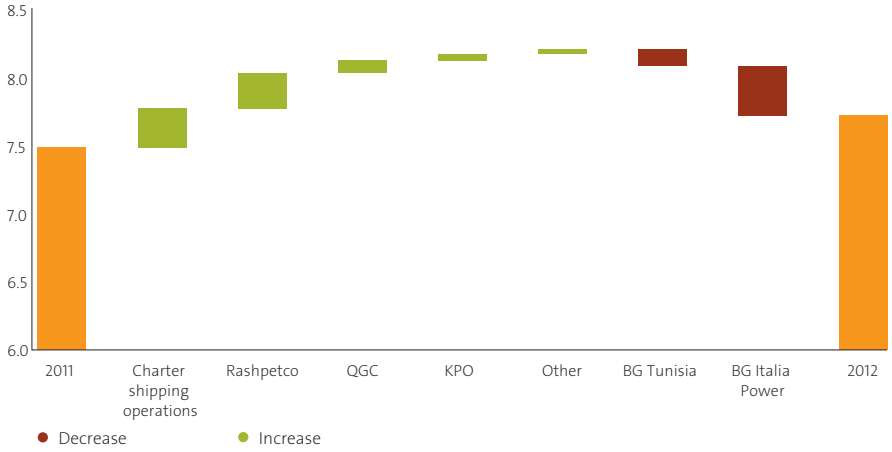
Industry collaboration
We also participate in collaborative research with industry bodies in the field of climate change.

In 2012, we joined the International Emissions Trading Association (IETA) and continued our membership of the IEA GHG programme, IPIECA, the Carbon Capture and Storage Association in the UK and the Global Carbon Capture and Storage (CCS) Institute. We are also a member of the Gulf Coast Carbon Center in the USA, and the Cooperative Research Centre for Greenhouse Gas Technologies (CO2 CRC) in Australia.

BG Group GHG emissions: by source
(million tonnes CO_2e)



BG Group operated emissions
(million tonnes CO_2e)



[1] See Performance data for detail; the 2011 figure was restated from 18 000 reflecting changed IEA emission factors.

ENERGY EFFICIENCY

Overview

Energy efficiency was a key issue during the year, as we focused on creating business as well as environmental benefit from better efficiency. We continued to carry out projects to reduce our energy consumption and losses of energy during fuel use, flaring and venting. These included initiatives across the business, with the greatest savings coming from projects in Kazakhstan and Tunisia and in our LNG shipping business. In 2012, we set targets for our operations to deliver our new greenhouse gas (GHG) emissions intensity target. Operations will prepare energy management plans that will formalise their approach to optimising energy use. We encouraged a low-carbon culture with initiatives in our head office in Reading, in the UK and elsewhere.

Energy efficiency and greenhouse gas emission reduction projects

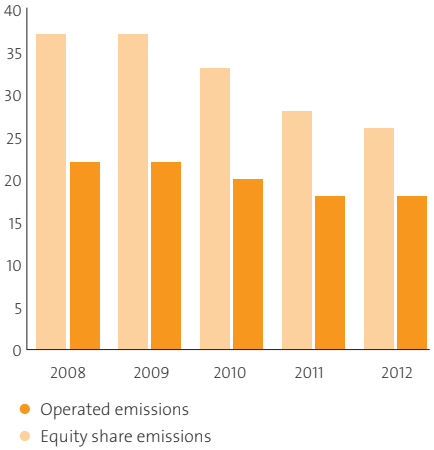
More than 50 GHG reduction projects in nine locations were implemented within the 2007 to 2012 GHG emission reduction target period. These projects improved energy efficiency by reducing the amount of gas flared, consumed to generate power, or vented.

The cost of the projects was approximately $20 million, yet these projects are now saving the business around $50 million each year by selling gas previously wasted.

The largest projects between 2007 and 2012 included: the recovery of fluids during well testing in our Kazakhstan operations (replacing flaring); the installation of ultrasonic flare metres at the Hannibal plant in Tunisia leading to subsequent improvements in flare management; and the replacement of steam LNG vessels with more efficient tri-fuel LNG ships. In 2012, energy efficiency projects delivered more than 400 000 tonnes of GHG emission reductions.

The largest contribution by an individual operation was achieved by our joint-venture operations in Kazakhstan The examples below illustrate energy efficiency projects achieved in the target period that have saved emissions and enhanced production.

BG Group GHG emissions intensity[1]
('000 tonnes/mmboe)



[1] Emissions intensity is calculated by dividing total emissions for the year by the total barrels of oils equivalent produced in that year..

ENERGY EFFICIENCY CASE STUDY EXAMPLES

Egypt: Additional production at no additional cost

The Rashid Petroleum Company (Rashpetco) in which we have a 40% shareholding, initiated a project that reduced its flare purge rates (the rate at which gas is supplied to the flare) by 61% in 2012. Following review by our energy efficiency consultants and our own follow-up analysis, we were able to reduce the amount of gas sent to flare.

As part of this change, we spent time with the local operators whose primary concern was to prevent the flare going out, which would be an operational risk; we therefore had to explain the approach and build confidence that the new approach was sufficient and safe.

This change led to a decrease in emissions of 60 000 tonnes of GHG, and increased gas sales of around 130 000 barrels of oil equivalent each year with a net present value of $35 million over five years. This was done without incurring additional costs and the gas that was flared is now sold.

This initiative has brought increased gas sales not just for BG Group but also for our partners in Rashpetco and for Egypt.

Kazakhstan: Improvements in energy efficient practice and reduced flaring

Our (joint-venture) operations in Kazakhstan have set up a comprehensive energy efficiency management programme to enhance their use of energy and reduce their carbon emission exposure to regulatory payments. Success has been achieved by embedding awareness and ownership for energy management into day-to-day operations. Each year emission reduction opportunities are reviewed, and refreshed in a register. Processes are regularly reviewed by senior management and objectives and targets identified annually, providing profile and leadership from the top down. The strategy focuses on enhancing operational efficiency by targeting capital investment on high-return projects.

Tunisia

Optimised amine chiller operation

We use amine to clean gas before export: the gas is run through the amine which cleans and removes CO2 and sulphur. The amine is then recycled, but needs to be cooled before reuse. To cool the amine, we use a fin fan cooler – a system that draws air up through the pipework through which the amine passes.

In our onshore gas refining operations in Tunisia, enhancement of the maintenance and cleaning of the fin fan cooler system identified that air cooling alone was sufficient for higher ambient temperatures than previously considered. This reduced by two months per year the time that the chillers were required to operate, so reducing the electrical load on the main generators by 1.4 MW. The project resulted in a reduction in emissions of around 1 500 tonnes per year and also created cost savings.

Optimised sales gas booster compressor increases production and reduces emissions

We use compressors to achieve the right pressure of gas in the pipelines that take gas from our Tunisian operations to market. We were using a booster compressor as well as a main compressor. We undertook a study to review compressor use, and as a result were able to improve the balance of compression demand with sales volume in the pipeline. Removing the booster compressor from service delivered a net reduction in electrical power requirement for the compressor motors of 1.4 MW, saving fuel gas and reducing GHG emissions by more than 8 000 tonnes per year, without extra cost.

Australia: LNG plant efficiency

Liquefaction plants are energy-intensive parts of the LNG production process. At our Queensland Curtis LNG plant in Australia, we designed and are building a liquefaction plant that uses thermally efficient aero-derivate turbines for refrigeration and for power, to reduce the amount of gas required. The plant will also recover waste heat to eliminate the need for furnaces to be used during normal operations. It is a good example of how to use best available techniques to build in measures that reduce GHG emissions to a practicable minimum over the life of the facility.

The new design will reduce overall plant emissions by 29% when compared to the project's base case and by 20% when compared to the previous design. It will generate a saving of approximately 700 000 tonnes per year, and will bring an estimated operational saving of about $20 million per year. In our view, the design has set a benchmark for LNG export plant design that can be used by future projects both within BG Group and in other LNG projects.

Engaging with employees
Engaging employees to suggest, and participate in, energy efficiency initiatives is essential to building an energy efficiency culture. During 2012, we took steps to encourage a low-carbon culture with local initiatives. Our headquarters in Reading, in the UK, for example, gained certification to the Carbon Trust Standard in 2012. This required:

- an accurate footprint measurement including all required emission sources
- demonstration of an absolute reduction of the carbon footprint or equivalent relative efficiency improvement
- demonstration of good carbon management, sufficient to meet the needs of the Standard, including carbon governance, accounting, reduction methods and targets.

Certification runs until 2014 when we will be required to undergo a re-certification assessment.

Our environmental network brings environmental champions together to identify ways to reduce environmental impact, including actions to save energy and reduce waste.

The network has led to a number of awareness-raising initiatives, including encouraging individuals to assess their own carbon footprint using the UK government's carbon calculator. This is supported by communications from senior managers in the Group to promote carbon awareness, including publications as part of World Environment Day.

Targets for energy efficiency improvements on sites form part of our regular performance monitoring and part of the process for accreditation of our operations to ISO 14001, the international environmental management systems standard. The standard requires a commitment to continuous improvement.

For 2013, we have set GHG emissions intensity targets for most of our operations which will lead to increased engagement on energy efficiency issues.

ENVIRONMENTAL IMPACT MANAGEMENT

OVERVIEW

During 2012, we carried out more than 20 best available technique (BAT) assessments to ensure appropriate environmental technology was selected. Projects reducing GHG emissions by 400 000 tonnes were achieved which delivered the 2007-2012 GHG target. We carried out work towards reinstating a sulphuric acid plant in Tunisia and managed biodiversity issues in Trinidad and Tobago and Australia, where improved dredging minimised impact and saved $20 million. We increased investment in environmental technologies, including making a $9.5 million investment in Project Blue, a project to develop an ocean monitoring system in Brazil[1]. We were one of only two oil and gas companies in the FTSE350 Carbon Disclosure Leadership Index for 2012. Our environmental performance also forms part of the external assessment of our sustainability performance for which we scored 98% in the FTSE4 Good index and were in the top 3% in the Dow Jones Sustainability index.

BIODIVERSITY

Biodiversity is an increasingly high-profile issue for resources companies, which often explore for and develop new reserves in remote environments where there has been little or no other development. Sensitivity to the impact that these activities can have on species is therefore of critical importance.

Our approach to managing biodiversity is set out in our Environmental Standard, which is aligned with international best practice.

The Standard includes a requirement to carry out environmental impact assessments (EIAs), to take action to avoid, minimise or compensate for[2] any impacts identified and to develop biodiversity action plans for all activities that may have an impact on critical habitats or legally protected areas. The impact assessment process looks at potential impacts to, for instance, endangered habitats and plant and animal species such as those included on the IUCN Red List or national conservation lists. We do not collate Group-level data on biodiversity; our approach recognises that biodiversity impacts are highly localised, and best handled at the local level.

We are a member of the biodiversity working group of IPIECA, the global oil and gas industry association for environmental and social issues, which is a valuable way of staying abreast of biodiversity issues relevant to the oil and gas sector. Its work includes monitoring emerging issues such as ecosystem services (the benefits and value provided by natural ecosystems) and emerging practice in relation to biodiversity offsets.

BIODIVERSITY IMPACTS AND INITIATIVES

Most of our operations do not face major biodiversity challenges, as we do not generally operate in areas considered highly sensitive with regard to biodiversity, or specially protected, such as IUCN category areas or national nature reserves.

However, we do have some activities near such potentially sensitive areas, notably QGC in Australia, Dragon LNG in the UK and our activities in Bolivia and in Trinidad and Tobago. In these instances, in accordance with our environmental Business Principles, we require our operations to take active measures to manage biodiversity.

Bolivia
Our operations in Bolivia are in the Gran Chaco which is one of the largest dry forest natural habitats in South America. We have developed a local biodiversity action plan to protect and enhance local habitats, including restoration of previously cleared areas and biodiversity monitoring. The results were published in a booklet, Wildlife at La Vertiente Gas Plant – Gran Chaco Tarijeño, which aims to contribute to biodiversity knowledge and awareness.

Dragon LNG
Our Dragon LNG terminal at Milford Haven in Wales is near European marine protected areas in Pembrokeshire; however, we have relatively limited activities here and therefore limited impacts on the biodiversity of the local area. Nevertheless, we have undertaken several projects to enhance biodiversity on the site, including tree planting to enhance habitats and biodiversity monitoring.

[1] A research and development levy requires BG Group to invest 1% of its gross production revenue from Brazilian fields that have an obligation to pay special participation, on R&D in Brazil.

[2] This approach is known as the mitigation hierarchy and sets out the priorities for managing biodiversity.

Trinidad and Tobago
In Trinidad and Tobago, our onshore operation lies partly within a nationally designated forest reserve. In this area, our operations have significant impact only in relation to the Victoria Mayaro Forest Reserve, where we have taken 21 hectares of the forest reserve for our project infrastructure, during the life of operations in the area which is expected to be 30 years.

Since 2007, we have been engaged in a reforestation project in Trinidad and Tobago, in order to compensate for the use of land for essential drilling and production activities. We funded a programme to reforest the 21 hectares of degraded secondary forest in order to enhance both biodiversity and local community engagement. The reforestation programme reached a successful conclusion in 2011 and has now been transferred to the government Forestry Division in Trinidad and Tobago for future management.

Australia
In Australia, the environmental impact statement for our Queensland operations is in the public domain and has been approved by the State and Commonwealth authorities. It includes measures we must take relating to biodiversity, such as detailed habitat and species management plans covering terrestrial and marine areas. Biodiversity is one aspect of our impact management plan, and one of the issues we consider when assessing potential sites.

Our Queensland operations lie outside the Great Barrier Reef Marine Park but are within the broader area of the Great Barrier Reef World Heritage Area. Concerns were raised about the impact of coal seam gas development on the Barrier Reef area and especially the impact of dredging upon the extensive meadows of sea grass in Gladstone Harbour. Sea grass is important because it provides a habitat and food for protected animals including the dugong. The key concern is that dredging could increase water turbidity, reducing the light available for the sea grass to survive.

To address these concerns, we established a multi-disciplinary team to develop a method to compare the amount of light reaching the sea floor with the minimum required for sea grass growth as a way to better control impacts from the dredge plume. This provided a more direct assessment of sea grass health than conventional turbidity thresholds alone. This project has resulted in a new method for monitoring and regulating dredging in Queensland and its impacts on sea grasses, and we understand this method is now being considered for other dredging projects in Queensland and Australia. For the QCLNG project, the new monitoring method resulted in improved dredging efficiency and no downtime of dredging activities (saving approximately $20 million from expected delay costs compared to traditional methods of regulating dredging). Furthermore, evidence suggests that the sea grass meadows have recovered vigorously since record flooding in 2011-12 despite dredging occurring.

Brazil
We continued to participate in a cetacean monitoring programme in the Santos Basin, which we sponsor jointly with Chevron. The two-year programme is being run by the Federal University of Rio Grande do Sul (UFRGS) and the Aqualie Institute, a not-for-profit organisation based in the state of Rio de Janeiro, that aims to promote environmental sustainability through research and education initiatives. The programme aims to determine areas of whale and dolphin concentration, using satellite and radio telemetry to investigate movements, habitat use and behaviour.

At the Rio+20 United Nations Conference on Sustainable Development in June, we announced $9.5 million of support for Project Blue, a partnership between BG Brasil and Coppe/The Federal University of Rio de Janeiro (UFRJ), to develop an ocean monitoring system for the Santos Basin. It will provide key data to help protect the environment and improve safety.

International
We have participated for several years in an International Association of Oil and Gas Producers (OGP) joint industry project which explores the effects of underwater sound (such as that produced by seismic exploration) on sensitive marine species such as whales. This work continued in 2012.

FLARING AND VENTING

High flaring rates typically arise when oil companies that cannot distribute or market gas, flare off the gas associated with their oil production. This can sometimes be a continuous process and so has a considerable environmental impact.

Our business is focused on getting gas to market and so we capture and sell the gas wherever practical.

Our policy is to have no continuous flaring during normal operations and to implement BAT within facility designs and operations.

This includes developing flare mitigation plans, managing facilities to avoid depressurisation events that could lead to flaring, and using ignition systems that minimise releases to the environment.

Our Environmental Standard mandates that no continuous flaring or venting of gas associated with oil or condensate may take place in new developments, and a flare mitigation plan shall be developed during the design stage to minimise flaring during commissioning/early field life.

There are, however, cases where flaring is required as an essential safety feature, to depressurise plant or because of the presence of a hazardous component such as hydrogen sulphide which has to be incinerated. Alternatively, flaring may be required during the well testing phase of production when infrastructure to capture the gas is not yet in place. In Tunisia, for example, where sulphur must be removed, there needs to be sufficient gas supply to keep a pilot alight and to be able to purge the plant if necessary. Where flaring or venting is necessary, we will flare in preference to venting, which will only be an option if flaring is not possible or would have a more significant impact on the environment.

Overall, our flaring-related emissions rose between 2006 and 2010, principally as a result of increased drilling and associated well testing activity and the incineration of acid gas. Flaring declined in 2011 but increased by 11% in 2012 primarily due to increased activity in Australia and increased well testing. It has represented just 5-10% of our total annual GHG emissions in the past five years.

The OGP measures flaring as a percentage of unit production; we perform well against industry averages. Reducing flaring is very important to us and forms part of our overall effort to cut

emissions and reduce losses of energy. Many of our emission reduction projects relate to flaring reduction.

In 2012, for example, our joint-venture operations in Egypt carried out a flaring optimisation study and reduced flaring by 61%.

FUGITIVE EMISSIONS

As unconventional gas activities have developed, fugitive emissions have become an increasingly high-profile concern. Fugitive emissions are unintentional releases or leaks of methane, which escape directly to the atmosphere during the oil/gas production and distribution process.

Fugitive emissions typically occur during well development, before the infrastructure is in place to capture the gas produced, but they can also arise from leakages in pipe work connections and storage tanks. This is a concern, because methane is a potent GHG and methane from fugitive emissions leaks directly into the atmosphere, resulting in a greater short-term impact than when it is combusted.

The scale of unconventional gas resources being developed worldwide has led to concerns about the potential emissions impact of their development. Unconventional gas production typically results in higher methane emissions at the wellhead (compared to conventional production) during well development and completion (not at other stages of the life cycle). This is due in particular to the impact of the hydraulic fracturing process[1].

For this reason, policy makers, regulators and industry analysts, in particular in the USA, have become increasingly concerned about managing and mitigating fugitive emissions. A number of research reports[2] analysing best practices for the gas industry have pointed to the importance of managing fugitive emissions, and this is also the focus of the US Environmental Protection Agency's (EPA) New Source Performance Standards[3] issued in April 2012.

During 2012, we took steps to reduce fugitive emissions from our operations. In particular, we introduced 'green completions'[4] as standard throughout our operations in the USA, recognising that EPA regulation will mandate green completions by 2015.

We are also one of a number of oil and gas companies participating in and sponsoring a major industry study into fugitive emissions being conducted by the Center for Energy and Environmental Resources at the University of Texas at Austin. The objective of the study is to generate more accurate data on current levels of methane emissions from natural gas production. Industry participants are providing access to certain production facilities for data collection. The study is expected to conclude with a final report in 2013.

The study, which is also sponsored by the Environmental Defense Fund, will be rigorous, with a scientific advisory panel to ensure its integrity, and planned publication in a peer-reviewed journal. The research complements work conducted by the American Petroleum Institute and America's Natural Gas Alliance (ANGA) during 2012. This study gathered data on key industry activities and equipment emission sources – including unconventional natural gas production – that are critical to developing credible estimates of methane emissions.

INVESTING IN ENVIRONMENTAL TECHNOLOGIES

Investing in new technology can help us minimise our environmental impact and can potentially bring significant business benefits. Our Environmental Standard requires our operations to review their practices against best available techniques (BAT) and identify improvement plans if necessary.

In 2012, more than 20 BAT assessments were carried out which identified opportunities to optimise performance and increase energy efficiency including at gas plants in Tunisia and Egypt and a future floating production, storage and offloading (FPSO) vessel in Norway. Where appropriate, these plans include commitment to projects that implement or seek to develop new technology and innovation.

LOWER-CARBON TECHNOLOGIES

During 2012, we continued work to develop lower-carbon solutions, in particular through the work of our technology group.

Our investment in technology is led by technology hubs – centres of expertise that will lead research and development programmes. The hubs will play a key role in managing investments required to tackle multi-functional challenges – such as applied carbonate technologies (to increase recovery rates in carbonate fields) or carbon management and gas utilisation (to reduce emissions and identify and develop gas utilisation technologies).

In 2012, our technology hub on carbon management and gas utilisation, created in 2010, continued its work on programmes to improve Group-wide energy efficiency, explore opportunities for carbon management and integration (including options for carbon capture and storage and use) and develop awareness and knowledge of existing and new technologies for the use of gas.

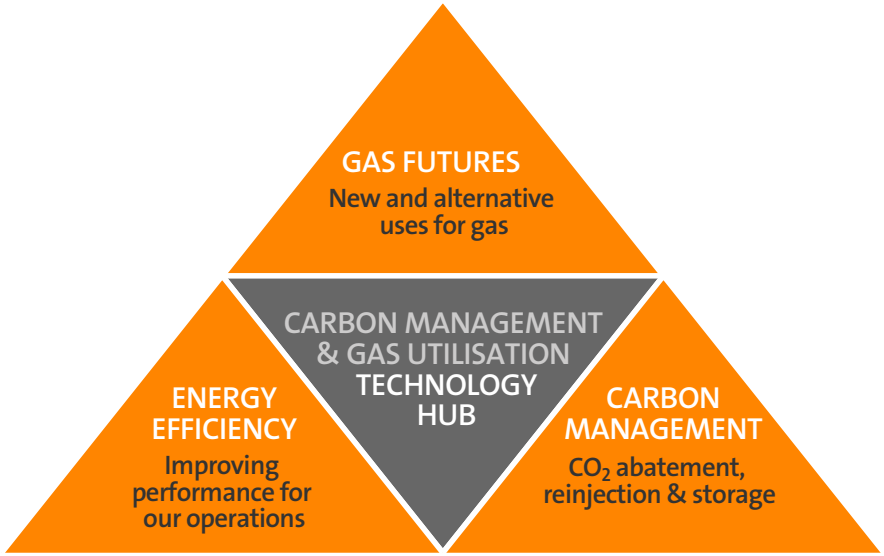
1 After fracturing, the fluid used to fracture must be pumped out of the well. During this process, gas flows back up the well, trapped in or associated with the fluid. The fluid is typically stored in tanks, and the methane in the fluid can escape into the atmosphere. Similarly, early gas production has been vented or flared for the period until the well is hooked up to a pipeline. This means that during development and completion, emissions are higher if not managed.

2 For example the March 2012 NRDC report, Leaking Profits, and the International Energy Agency's May 2012 publication, Golden Rules for a Golden Age of Gas.

3 Under the Clean Air Act, the EPA must set standards (New Source Performance Standards or NSPS) for industrial categories that contribute to air pollution. The EPA is required to review these standards every 8 years. The existing NSPS were issued in 1985, and EPA's existing air toxics standards for oil and gas production were issued in 1999. In April 2012, the EPA issued its long-awaited update to the NSPS: final rules to reduce air pollution from oil and natural gas operations, including specifically new federal air standards for wells that involve hydraulic fracturing. These rules are to be fully enforced from 2015 and will require oil and gas companies to capture methane as well as pollutant gases from 2015 using specified 'green completion technologies (see below for explanation).

4 Green completion is a term used in some markets to describe methods or technologies that reduce methane losses during well completions. When a new well is being constructed, it has to be cleaned before it starts to produce – and gas produced during this process is normally vented to the atmosphere. Green completions use portable equipment to capture this gas and typically recover more than half of the total gas produced for sale, reuse or flaring. In using this approach, investment can typically be recovered within two years. Some US states and cities require green completions and some oil and gas companies already voluntarily use them. The EPA estimates that mandatory green completions in the USA will point to a cost saving of $11-19 million in 2015 when the rules are fully implemented.

Carbon management and gas utilisation technology hub



Our priority is to reduce the carbon intensity associated with our operations, as well as examining product characteristics to identify novel uses of gas in areas such as transportation and infrastructure.

We are sponsoring a number of projects and initiatives to enhance our understanding of the critical success factors for fuel cells in the Brazilian market, as well as in other markets of interest to us globally.

Our technology approach emphasises engagement with external organisations and research bodies. We have been particularly active in forming such relationships in Brazil, where we are building our Global Technology Centre, and will coordinate our Group-wide technology activities[1].

Read about our Global Technology Centre and Science without Borders in our Brazil case study

One example of our work in 2012 was collaboration with the São Paolo Research Foundation in Brazil to explore research and development priorities for gas utilisation in Brazil and elsewhere. This resulted in identifying nine priority research themes for potential development, including low-carbon power generation (including fuel cells), fuel substitution and transport (including the decarbonisation of gas networks), new applications for gas, and work on policy and gas infrastructure (including smart energy grids). We continue to work with the Foundation to formalise these initial proposals and develop them into robust projects.

We also set up an energy efficiency programme, with the aim of delivering a step change in our energy utilisation through partnership with Brazilian and international institutions, original equipment manufacturers, and spin-off companies. As part of the programme, we will explore technology options for improving waste heat recovery and options for low-carbon power generation in particular.

WATER INVESTMENTS

We are also making significant investments in water-related projects, especially in Queensland.

Read about water technology in the Water section and in our QGC case study

SULPHUR REDUCTION

In 2012, we carried out substantial technical work and pilot trials to examine the potential for a major sulphuric acid plant that would lead to a sizeable reduction in sulphur dioxide (SO_2) emissions from our operations in Tunisia. The gas from our Miskar field in Tunisia has very high hydrogen sulphide content, and the sulphur is currently incinerated, releasing on average 40% of our total SO_2 emissions. We carried out field trials on a sulphuric acid plant originally commissioned in 2009, which will convert this to saleable sulphuric acid. Detailed designs are now under consideration. This project is being fast tracked, with the aim of delivering a reinstated plant by 2015.

ENVIRONMENTAL PERFORMANCE

This section sets out the main environmental data for the year 2012, with context and explanation where required. We report this data annually; for comparative figures from previous years read our historic sustainability reports.

Environmental Management System certification

We are committed to ensuring that the Environmental Management Systems EMS at all our major operated businesses are effective at managing their environmental risks. Our Environmental Standard requires all the businesses we operate to gain ISO 14001 certification within two years of start-up or acquisition. At the end of 2012, 100% (11 out of 11) of our major operated interests were certified to ISO 14001 (80% in 2011) and 50% (two out of four) of our joint-operated joint ventures were ISO 14001 certified (33% in 2011), for a combined total of 87% (13 out of 15).

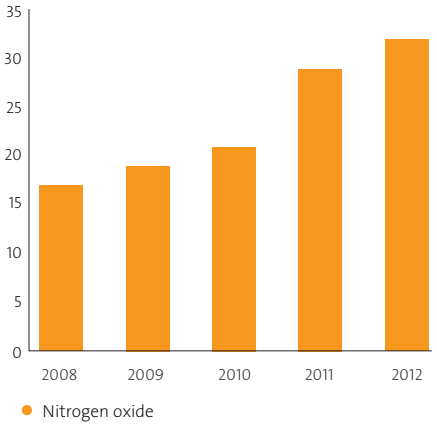
In 2012, we certified our Reading head office, in the UK, our UK Dragon LNG terminal in Milford Haven, Wales, and our operations in Queensland, Australia. Dragon LNG specifically designed its EMS to cover various operations, including import, storage and regasification of LNG. Our Queensland operations created an EMS with a scope to cover well development, power stations, water treatment, camps and offices near Brisbane and Chinchilla. Our Reading head office was our first office-based operation to achieve ISO 14001 certification and gained OHSAS 18001 certification at the same time. We plan to extend this to other offices in 2013.

Group HSSE audits also examine the operation of EMSs. In 2012, we conducted audits at our businesses in Aberdeen, Scotland, Australia, Egypt, India, Kazakhstan, Trinidad and Tobago, and Tunisia, and also in our Global Shipping business.

[1] BG Group is required to invest 1% of its gross production revenue from Brazilian fields on R&D in Brazil.

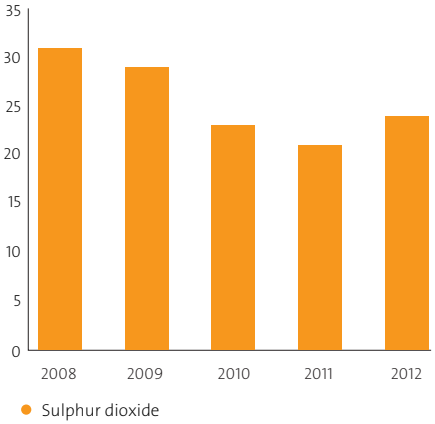
Non-greenhouse gas air emissions
Our activities generate air emissions including nitrogen oxides (NO_x) and sulphur dioxide (SO_2) from the burning of fuel and from flaring. Smaller volumes of carbon monoxide (CO) and volatile organic compounds (VOCs) are also emitted.

NO_x emissions to atmosphere
('000 tonnes)



During 2012, NO_x emissions totalled 32 000 tonnes, an increase of 10% compared with 2011. Total NO_x emissions per unit of throughput increased by 12% between 2011 and 2012. This increase in 2012 came predominately from increased activity and use of oil as fuel in our shipping operations and the ramp up of activity in Australia. The last six years have also seen an increase in NO_x aligned mainly with the increased activity in shipping.

SO_x emissions to atmosphere
('000 tonnes)



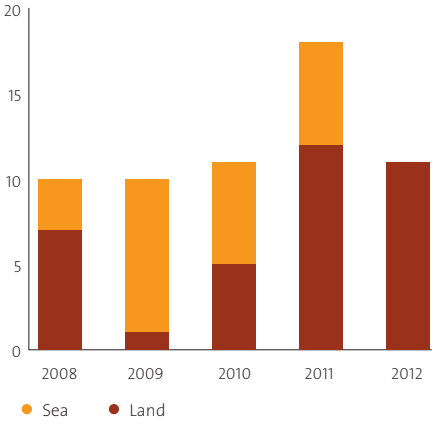
During 2012, SO_2 emissions totalled 24 000 tonnes, an increase of 14% compared with 2011, due largely to increased oil used for fuel in our shipping operations. Total emissions per unit of throughput increased by 14% between 2011 and 2012. Around 40% of the Group's SO_2 emissions arise from Miskar in Tunisia, where the reservoir gas has very high hydrogen sulphide content. Sulphur is currently incinerated but plans for a plant to address this are being fast tracked, with delivery targeted for 2015.

Spills
Our business involves storing and transporting liquids, including oil, diesel, drilling muds and chemicals. Our equipment, policies and training aim to prevent any unplanned release of solid or liquid material to land or water.

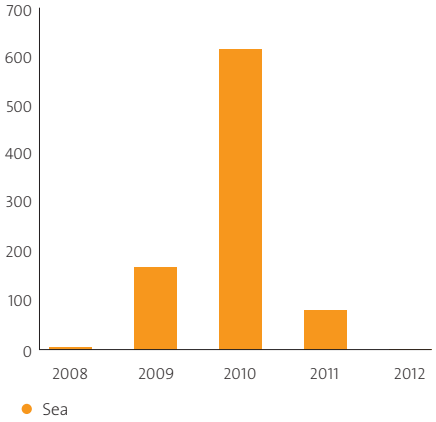
Hydrocarbon spills
In 2012, the total amount of oil spilled fell by 79% from 285 barrels to 61 barrels. There were 209 hydrocarbon spill incidents reported during the year compared with 164 in the previous year. There were 17 hydrocarbon spills to sea, totalling one barrel; no individual spill to sea was a barrel or greater in volume.

The largest individual spill to land was at our operations in Queensland, Australia. During refuelling activities as a drilling camp, 1.3 m^3 of diesel was released when a pump was not turned off after completion. Immediate corrective measures were put in place, including signage and a beacon light indicating when the pump is running. No hydrocarbon spills in 2012 from our operations had a significant environmental impact.

Number of hydrocarbon spills
(of one barrel or more)



Total volume of hydrocarbon spills to sea
(barrels)



Water spills
While we aim to contain the water produced by our operations so that it is safely stored, transported and disposed of, there have been incidents of uncontrolled release of saline and desalinated water. It should be noted, however, that the water produced from coal seam gas typically has a salt concentration of 2 000-6 000 parts per million (ppm). By way of comparison, seawater has an average salt concentration of around 35 000 ppm.

The total number of water spills in 2012 was 25, with a total of 170 cubic metres of water spilled. This compared with 36 spills in 2011, totalling 1030 cubic metres.

The biggest single incident involved 105 m^3 of fresh water containing sediments spilled from a trench over 30m^2 of land and into a surface watercourse. The creek was cleared using netting and the trench was reinforced. Tool box talks were updated to include the risk of environmental incidents.

Waste

Waste represents an environmental burden, financial cost and potential reputational liability. Conversely, waste minimisation provides opportunities to reduce costs and improve efficiencies. We have committed to minimising resource use and reducing the volume and hazardous nature of wastes by applying the waste hierarchy[1] and adopting best available techniques, wherever practicable.

Our activities generate waste streams, including metals, hazardous waste, cuttings, and other material classified as general waste. Information about the total weight of waste disposed, by waste type, is shown in the graph to the right.

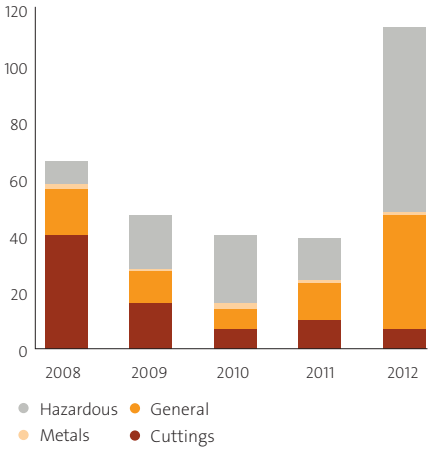
The disposal method is determined by our Environmental Standard and the BG Group HSSE Performance Monitoring and Reporting Standard.

BG Group reported an increase of 190% in total waste disposal from 39 000 tonnes in 2011 to 113 000 tonnes in 2012. This increase is primarily as a result of the availability and inclusion of data from our Australian activities and US shale gas operations. Excluding these new additions to the Group figures, our total waste increased 5% on a like-for-like basis.

Cuttings waste decreased from 10 000 to 7 000 tonnes, primarily due to the nature of onshore drilling activity during the year: different geologies will result in different waste levels.

In 2012, 35% of our total waste was sent for re-use or recycling; this includes 54% of our hazardous waste. The majority of general waste was sent to authorised landfill.

Waste disposal
('000 tonnes)



Offshore controlled discharges

Our offshore gas exploration and production processes also result in water discharges that contain oil – known as 'controlled discharges'. In 2012, the amount of oil in process water discharged from our operations increased by approximately 12 tonnes (10%) from 120 tonnes in 2011 to 132 tonnes. The total quantity of oil in drill cuttings discharged offshore in 2012 increased by 164 tonnes to 239 tonnes.

ETHICAL CONDUCT

Overview

Stakeholders' expectations of corporate ethical conduct have increased and legislation such as the UK Bribery Act 2010 (which came into force in July 2011) has been introduced. While we have always had a zero tolerance approach to corruption, we recognise the importance of continued vigilance.

During 2012, we carried out internal audits on how we appoint third parties, including agents and intermediaries who interact with public officials. We looked specifically at ensuring that due diligence on these third parties was being fully and effectively carried out[2].

We conducted an independent review of our fraud management processes, continued to seek to influence our non-controlled joint ventures to meet high standards of ethical conduct, assessed the robustness of our anti-bribery and corruption procedures in selected operations and continued training our people in key areas. We revised and re-issued our Business Principles employee guide, Principles into Practice, and launched a handbook on how to test our anti-bribery and corruption procedures. We continued to investigate reports made through Speak Up, our independent service for reporting potential breaches of our Business Principles.

Anti-corruption, bribery and fraud

Like other international oil and gas companies, we face the challenge of working in territories where the perceived or actual risk of corruption and bribery is high and where we do not necessarily have a controlling interest in all of our joint ventures. We have a policy of zero tolerance of corruption. However, managing the risk is getting tougher as new regulations and legislation (such as the UK Bribery Act 2010, which came into force in July 2011) are introduced in an environment where prosecuting authorities are increasingly active, cooperating across jurisdictions and levying record-breaking fines.

In 2012, we continued to build on and strengthen our procedures for managing ethical conduct risk. We examined how to maximise our influence in non-controlled joint ventures and conducted an independent review of our fraud management processes across the Group. A number of actions were identified, some of which were implemented in 2012 and others will be implemented during 2013 and beyond.

Due diligence

We carry out corruption risk assessments of territories/countries that we are considering entering as well as due diligence into the ethical conduct track record of potential joint venture partners and providers of materials and services.

In 2012, we revised our Ethical Conduct Due Diligence Standard to bring greater alignment with the new Contracts and Procurement Standard which was issued in 2012 and states how to source a contract and manage it after contract award. The challenge is to balance a quick and efficient contracting process with sufficient and proportionate due diligence. The Ethical Conduct Due Diligence Standard was also revised to bring greater clarity and direction over the due diligence required when considering potential social investment partners and technology partners.

1 The waste hierarchy classifies waste management options in order of environmental impact, such as: reduction, reuse, recycling and recovery.

2 The relevant BG Group Standards are the Appointment of Agents, Intermediaries and Political Consultants Standard and our Ethical Conduct Due Diligence Standard.

Guiding and training those who work for BG Group
We continued to provide guidance on managing ethical conduct risk in 2012. We revised and re-issued Principles into Practice our internal guide to our Business Principles (including Ethical Conduct). We took particular care to provide guidance on our approach to gifts and hospitality, ensuring employees giving or receiving hospitality during the 2012 London Olympics and Paralympics followed our Standards.

We recognise that senior-level commitment is vital to effective ethical conduct risk management. During the year, we enhanced our leaders' self-assessment checklist on ethical conduct, anti-corruption and bribery. This spells out what senior level commitment should look like in practice and is designed to be a practical guide for our people in leadership positions.

In 2012, we released an advanced e-learning course on anti-bribery and corruption, which complements the mandatory fraud and bribery e-learning launched in previous years. It gives a detailed understanding of relevant UK and USA legislation, and is especially useful for those working in areas where they may be exposed to the risk of corruption, such as procurement. A second annual workshop for local compliance officers reviewed working arrangements with our Ethical Conduct Compliance Unit and discussed future developments.

We provided training in 2012 through our fraud and bribery e-learning, which is mandatory and encourages individuals to be alert to risks and possible instances of fraud and bribery and to report concerns. More than 2 000 employees and individual contractors, mostly new starters, completed this training in 2012 (in 2011, its first full year of use, nearly 7 000 employees and individual contractors, both new starters and existing employees and contractors, completed this training).

Auditing and assurance
During 2012, we launched a handbook (the Adequate Procedures toolkit) on how to test the robustness of our anti-bribery and corruption procedures. We monitored actively the implementation of our anti-bribery and corruption procedures using this toolkit, working with Good Corporation (an independent assessor) to test them in our businesses in China, India, Italy and Tanzania.

In-house teams visited other Group businesses during the year, and worked with local leadership to help them manage bribery and corruption challenges. Our goal is to ensure that all our businesses have a plan of continuous improvement to manage ethical conduct risk. Our internal audit programme for 2012 focused on auditing compliance with the Ethical Conduct Due Diligence Standard and the Agents, Intermediaries and Political Consultants Standard. Internal audit identified areas for improvement in the ways that our businesses are complying with these standards.

Speak Up
Speak Up is our policy that requires our employees and individual contractors to report any situation where they have reason to suspect that there has been a breach or potential breach of our Business Principles, Policies, or any laws or regulations. We also encourage third parties to raise concerns about whether we are working in accordance with our Business Principles.

During 2012, 120 cases were reported under Speak Up (compared with 134 in 2011 and 151 in 2010).

More detail about the cases is given below:

- 37% related to reported malpractice (including allegations of breaches of the Group's Ethical Conduct Policy and Standards, including corruption)
- 33% related to general workplace concerns (including allegations of harassment, discrimination, unfair hiring practices and unfair treatment)
- 18% related to fraud (including allegations of theft or misuse of funds)
- 12% related to health, safety, security and the environment.

In 2012, investigations into 18 cases resulted in actions recommended against individuals, employees or contractors, ranging from training or disciplinary action to contract termination or other appropriate action. A further 22 cases resulted in follow-up actions such as changes to procedures and to organisational controls.

As far as we are aware there were no cases in 2012 where a law enforcement authority made an evidence-based corruption allegation against a BG Group employee.

We note that in 2012 the Brindisi court issued its verdict on criminal charges in relation to the Brindisi project and further information on this is set out in Note 24 E of Notes to the accounts – legal proceedings in the Annual Report and Accounts 2012[1].

In one of the Speak Up cases closed in 2012, we terminated the contract with a contractor company due to an incident of corruption.

Of the Speak Up cases closed in 2012 there were no cases in which employees were dismissed or disciplined for corruption or fraud. There was one case where two employees of a contractor company were dismissed as a result of fraud.

HEALTH AND WELLBEING

Overview
Employee health and wellbeing are key issues as the Group grows and moves into new countries across the world. We continued to build our health management resources and strengthen our processes for protecting employee health, as well as monitoring for occupational illnesses. Where appropriate, we invested in projects to facilitate certain community health services, such as the upgrade to the Nakta Heath Centre in Tunisia. We re-assessed our key global health risks and put into place a health risk management programme. We increased the number of dedicated medical practitioners in our operations worldwide and re-launched our Employee Assistance Programme, which offers our people 24-hour-a-day health, counselling and wellbeing support.

Occupational health and wellbeing
During 2012, we conducted a series of health risk assessment baseline reviews to understand our risks in more detail. We now have a global risk matrix which means we can target our resources, for instance where to focus the work of our occupational hygienist (recruited in 2012) to drive down those risks.

We place particular emphasis on full protection of our people from carcinogens in the workplace. We recognise the importance

[1] Please see Note 24 E in the Notes to the Accounts section of the BG Group Annual Report & Accounts for a full statement on Brindisi and other legal proceedings.

of focusing not just on reported health incidents, but on protection from longer-term health risks.

We also reviewed our processes for tracking our people travelling to countries with particular risks, such as Tanzania where malaria is a risk, and reviewed the products we provide, such as antibiotics for travel to North Africa.

During the year, we developed a health guide to entering new countries, which we expect to launch in 2013. This emphasises the importance of considering health issues as part of the planning process.

Community health and wellbeing
Our revised Social Performance Standard includes a clause on community health, safety and security. This requires social performance professional staff to work more closely with their health, safety, security and environment (HSSE) colleagues to ensure that health, safety and security risks in the community are effectively managed.

For example, in Tunisia (working with the Tunisian national oil company ETAP and local and national government partners) we invested in a project to upgrade the Nakta Health Centre. We and ETAP will contribute approximately $730,000 towards better healthcare provision for more than 20 000 people. This involves improving consultation and emergency services, and providing better X-ray facilities and a dedicated ambulance. The new facilities will mean that common health emergencies and other problems, such as heart attacks, can be treated locally; this greatly improves an individual's chance of successful recovery.

Employee health and wellbeing
In 2012, we continued to develop health management expertise at our businesses around the world. A health representative is now in post in every business, often supported by a specialist occupational health adviser.

We increased the number of dedicated medical practitioners within individual locations and appointed dedicated medical practitioners in Tanzania and in the UK Upstream.

We also re-launched our Employee Assistance Programme in 2012, which offers our people 24-hour-a-day access to psychological assistance, face-to-face counselling if required, and access to online health and wellbeing support, worldwide.

Occupational illness reporting
We continued to work to encourage increased reporting of health incidents. This enables us to identify new risks and any gaps or breakdown in our management system. We identified that reporting of illness was low, compared with lost time injuries, and sought to address this. This effort has had some success: for example, we have raised awareness of food-borne illnesses, launching e-learning and putting safety management systems in place. Our operations in India won an award in the health category of our 2012 Chairman's Awards (given for excellence in environment, health, safety and social performance), for their approach to managing this issue.

We have also seen improved management of heat stress in Queensland in particular, with 11 incidents reported in 2011 and one in 2012, after we took action to raise awareness and introduce better work rest breaks.

Information on occupational illness frequency is a key performance indicator in the Group quarterly HSSE scorecard. We continue to take action to address the issue of under-reporting.

OCCUPATIONAL ILLNESS FREQUENCY[1]

	Description	Number of incidents	Number of people
Africa, Central & South Asia	Food-borne illness	8	15
	Contact dermatitis	2	5
America & Europe	Heat stress	1	1
Australia & East Asia	Heat stress	1	1
	Musculo-skeletal	1	1
GEMS		0	0
TVP	Work-related stress	2	2

We launched new e-learning modules on occupational illness, food safety and fatigue in 2012, which are made available globally on the BG Group Learning Management System. This initiative was supported by promotional activities. Simple diagnostic health checks under our new global well-being programme were also provided, which sought to improve every employee's engagement with their own personal health. Recent campaigns have focused on sun awareness and physical fitness and more initiatives are planned for 2013.

HUMAN RIGHTS

Overview
Human rights have become a focus of increasing attention for businesses since the development of the UN Guiding Principles on Business and Human Rights. We strengthened our approach to human rights management in 2012, establishing a relationship with the Institute of Human Rights and Business and piloting indicators relating to the Voluntary Principles on Security and Human Rights initiative. We also played an active role in the work of IPIECA, the global oil and gas industry association for environmental and social issues, to strengthen the oil and gas industry's approach to human rights.

Collaboration and projects
During 2012, we continued to work with industry peers through IPIECA to improve human rights practices and share learning. We played an active role in two particular IPIECA initiatives. We co-chaired the IPIECA Grievance Mechanism Sub-Group which has among its objectives developing practical guidance to help companies implement grievance mechanisms. In support of this work, we are developing a grievance mechanism consistent with international good practice at our port facility in Mtwara, Tanzania.

We also played an active role in the IPIECA Human Rights and Social Responsibility Task Force and participated in the IPIECA Voluntary Principles Task Force which aims to provide a forum for the exchange of industry good practices as well as communicating industry progress externally.

[1] Reported cases only.

Relationship with the Institute of Human Rights and Business
During the year, we entered into a three-year relationship with the Institute of Human Rights and Business (IHRB). IHRB is a non-governmental organisation that operates as a global centre of excellence and expertise on the relationship between business and internationally proclaimed human rights standards.

Introduction of Voluntary Principles key performance indicators
We have agreed to pilot key performance indicators (KPIs) relating to our implementation of the Voluntary Principles on Security and Human Rights (the Principles). These KPIs cover both corporate commitments and country-level implementation. Two Tomorrows DNV will provide assurance, interviewing key people at Group level and in selected operations. The KPIs cover areas such as the senior team's commitment to the Principles, the policy for implementing the Principles, how this is assured, how human rights allegations are reported, how the Principles are implemented with the security providers we use and how incidents are handled.

NEW COUNTRY ENTRY AND POLITICAL RISK MANAGEMENT

Overview
Exploration and production opportunities arise in increasingly challenging locations. In 2012, we developed a more rigorous framework for assessing new market opportunities and introduced this to the Sustainability Committee for endorsement before it is implemented. This framework takes into account political, social, corruption and environmental risks as well as the wider geopolitical context. These risks were considered when we assessed a number of potential projects and new activities in 2012. In British Columbia, Canada, we engaged extensively with indigenous First Nation peoples. In Tanzania, we continued to build relationships with a wide range of stakeholders and established partnerships with key non-governmental organisations (NGOs). We also continued work on understanding the macro-economic impacts of oil and gas development.

New country entry
In 2012, we developed a more integrated framework for assessing new market opportunities. This takes into account the risks and geopolitical context of a new market, and how these may affect our licence to operate.

The new framework stresses the importance of ensuring that we consider, when looking at new markets, whether we can operate there in a way that is consistent with our Business Principles. This is particularly important in regimes where corruption is known to be an issue and so we carry out corruption risk assessments. The framework also seeks to ensure that our investments are diversified, that we put in place plans to build broadly based stakeholder support, and that our presence is seen as positive both by those in the country, and by external observers.

Social and community issues are included at the highest level of decision making when we enter a new market: we consider the potential impact of our operations on society, on the environment and on human health.

Political risk management
As we look at new markets, we look beyond commercial factors, aiming to assess wider environmental, social and governance issues including:

- geo-political risk (from international factors – conflict, trade war or sanctions, or political pressure from neighbouring states)
- the internal political stability of the government (including potential policy changes from any change of government, whether through democratic process or more disruptive change)
- the risk of either fiscal changes or forced renegotiation of contracts leading to increased 'total government take'
- the strength of the legal system and predictability of regulatory regimes
- political factors around the energy sector, including the role of the national oil company.

We also identify key stakeholders such as relevant government departments, community leaders, think tanks, and industry associations who may have influence.

Social impacts
We look at a range of ways in which we might affect people living in areas where we plan to operate including:

- whether indigenous people or other vulnerable groups could be affected
- if concerns over land use and ownership are likely to arise (recognising the importance of understanding traditional or customary land ownership)
- whether, as well as affecting people living close to our operations, we might also affect other groups in a broader area, including at regional and national levels
- if high levels of poverty exist
- if the potential for conflict or protest exists if we fail to meet community expectations
- if legacy issues exist from previous or neighbouring developments
- if environmental impacts may have a social aspect
- if there are many communities, and whether they are fragmented or ethnically complex
- if there is a high level of stakeholder activism in the area.

In certain countries, where the development of oil and gas is likely to have a significant social and economic impact, we may conduct socio-economic analysis to cover issues of corruption, transparency, resource management and institutional capacity. Increasingly, governments are requiring investors to make formal and quantified commitments to the country's social development objectives. We aim to do this where possible, making our commitments and our governance approach explicit, so that we can maintain control over how they are subsequently implemented.

Environmental and health impacts
We also consider potential environmental impacts, for example, considering sensitive or protected areas and reviewing how environmental constraints or regulations might apply to any future development. We also identify issues of water availability and disposal, and waste management and other environmental infrastructure, and take a view on the associated risks.

We look at our potential impact on the health of local people and our own employees and contractors in the context of the general health provisions in the country. We also consider threats to the well-being of our employees and contractors when visiting the country and identify and assess any security risks.

We conduct due diligence to understand human rights risks in new country entries. This is especially relevant in countries or regions with a poor human rights record, or where the risk of conflict is high or expected to endure. In these cases, a dedicated human rights impact assessment may be required. Assessments also consider risks from corruption, or a lack of transparency and good governance.

Actions in 2012
In the course of 2012, we looked at a number of prospective new countries, addressing many of the issues identified earlier.

Case study: **British Columbia**
An example of our approach was our engagement with First Nation communities in British Columbia, Canada, where we were conducting feasibility studies into a possible liquefaction facility and pipeline development. Here, external consultants identified both environmental and social issues – including the need to engage with Canada's indigenous First Nation peoples – as project critical. As a result, we established a strong governance framework to manage these issues from the outset. This included establishing an overall internal governance and consultative group which included representatives from our Social Performance, Environment, Commercial, Legal, Engineering, and Policy and Corporate Affairs functions. Social performance experts supported the engineering team during the site selection process and an expert was seconded to the project for a year, helping to develop the strategy. From an early stage, we held meetings with First Nation community group leaders to discuss the project and its impact on local groups, including potential benefits.

Case study: **Tanzania**
We became operator of a major offshore project in Tanzania in 2011. Since then, we have set up a significant presence within the country, establishing relationships with a wide range of stakeholders. Our offshore exploration and the creation of a supply base at Mtwara made it possible to recruit many Tanzanians, and provide support to communities located near our operations.

During 2012, we continued work on understanding the macro-economic impacts of oil and gas development. A major development, such as an LNG project, would have a transformational effect on the country. While this offers opportunities, it also creates challenges. We recognise how important it is to ensure that these challenges and opportunities are well understood by all the key parties.

In 2011, we commissioned Oxford Policy Management to assess the potential magnitude and associated impact of a hypothetical LNG project on the economy of Tanzania. The report outlines some of the challenges and opportunities for the country, and implications for the industry, in developing a gas export sector. It highlights issues that a large LNG project would present to public policy: challenges for macro-fiscal policy and in developing skills, such as those needed for LNG plant construction. It also highlights actions that would help Tanzanian industry link with the oil and gas supply chain.

We have had discussions with key stakeholders from the Tanzanian government, the World Bank, the International Monetary Fund and the Africa Development Bank on the report's findings. In addition to providing information about the project, the meetings have paved the way for a process under the leadership of the Tanzanian government where the key issues and measures can be considered.

PEOPLE AND SKILLS FOR THE FUTURE

Overview
Ensuring we have the right people for the future was a focus during the year. We announced the appointment of Chris Finlayson as our new Chief Executive and took a range of steps to strengthen our approach to finding and developing the people we need at all levels, in particular future leaders, including a more structured approach to identifying and developing talent. We developed a more targeted and responsive approach to surveying employees and continued training to help build leadership skills. Recognising the need to increase female representation at the senior leadership level, we introduced a diversity statement and set an aspiration to increase the percentage of women in leadership positions to 20% by 2020.

Appointment of new Chief Executive
At the end of 2012, we announced the appointment of our new Chief Executive, Chris Finlayson who took over from Sir Frank Chapman on 1 January 2013. This followed an extensive search process to replace Sir Frank, whose plans to retire in 2013 were confirmed in 2011.

Chris Finlayson joined BG Group from Royal Dutch Shell plc (Shell) in August 2010 and was appointed to the Board on 15 November 2011. Before being appointed Chief Executive he held two senior positions in BG Group and a number of senior posts at Shell. He has more than 35 years' experience in the oil and gas industry.

People for the future
Across the Group during 2012, we focused on understanding our future skills requirements and how we can meet them, whether by developing our own people or recruiting externally. We were able to make good progress against our recruiting targets but see ongoing challenges associated with obtaining and retaining skilled professionals.

We anticipate strong competition for certain skill sets we need, such as well engineering, project managers, reservoir engineers and geologists. We identified Australia and Kazakhstan as two main areas where we expect it to be difficult to hire and retain qualified individuals.

During 2012, to address this, we identified where around the Group we had people with these skill sets to help us identify where critical roles around the world could be sourced.

We took other actions, including leveraging social media and other recruitment channels, and increasing our visibility at recognised industry events and universities. This work will continue in 2013 and beyond.

We conducted market studies in areas where we identified skills gaps, to help us better understand demographics, staffing dynamics and the generation of talent pools from mainstream universities. We also participated in industry surveys that provide an external view of global demands and market trends in relation to attrition, retirement and current and future key skills shortages.

Talent review
We also did work to improve the ways in which we identify and develop employees with potential.

In 2012, we introduced a more structured talent review process across the business; we will conduct these annually as part of the talent and succession cycle.

In doing this, we assessed both performance and potential, using a proprietary model thatfocuses on five key indicators of potential. Using this model has brought more objectivity and consistency to talent identification and enabled us to identify four key talent pools: emerging, senior, functional and core talent.

By applying this model, we achieved a 21% increase in non-UK employees and a 6% increase in female employees identified as having the potential to take on senior roles in our organisation.

Development programmes
In November 2011, we introduced our Emerging Leaders programme aimed at senior and middle managers identified as having high potential by the talent review process. During 2012, 14 people completed this programme, which focused on leadership, commercial insight, networking with key senior stakeholders, and joint venture partners. It included the opportunity to work on specific projects aimed at driving cultural change in the Group. Attendees were identified through a three-day development exercise, where they were given feedback on their strengths and areas for development.

Course modules took place at Reading in the UK, Brisbane in Australia and Rio de Janeiro in Brazil. Delegates had the opportunity to meet our joint-venture partner, Petrobras in Rio and a landowner in Brisbane, as well as working with a number of other companies, such as Rio Tinto and AstraZeneca, to increase their network and commercial understanding. Delegates have gone on to collaborate with other organisations such as Rolls Royce to develop networks to consider issues such as global leadership challenges.

We ran a number of other development programmes during the year. More than 230 of our people attended our core leadership courses (Management Essentials, Performance Through People and Organisational Leadership) in 2012. Courses took place in Australia, Egypt, Trinidad and Tobago, Tunisia, the UK and the USA. We also provided a nine-month accredited internal coaching programme to increase our internal capability and so support development in a cost effective way.

To read more on our approach to career management and leadership, see How we manage people

Succession planning
In 2012, we significantly strengthened our approach to succession planning. We put in place succession plans for around 70 of our most senior positions and critical technical roles.

We developed a framework for succession planning designed to identify potential successors to senior Group executive roles, extend the pool of these successors and accelerate the development of leaders throughout the business. This framework categorises successors into those who are immediately available, those who will be ready in one to two years, and those who will be ready in three to five years. It also identifies roles where we need to look externally.

Recruitment
We continued our effort to attract candidates and retain our employees. We further developed our employee value proposition (which helps us articulate what working for BG Group means).

We also reviewed our approach to graduate recruitment, to introduce more consistency in our approach and assessment procedures worldwide.

We plan to introduce new systems to be used throughout the resourcing process – from search to recruitment to appointment. We are further developing the key performance indicators we use to measure how recruitment is being managed.

Diversity
During 2012, recognising the need to increase female representation at the senior leadership level, we developed a new diversity statement:

"We believe that we will deliver better and more sustainable results if we have a culture where different perspectives are encouraged and considered. To achieve this, we aim to build a workforce that is diverse – in ethnicity, gender, background and approach. We aspire to increase the proportion of women in leadership positions to 20% by 2020."

The statement was formally approved in January 2013 and progress against it will be monitored and measured regularly. We plan to take specific actions including: involving more female employees in our graduate recruitment activities; ensuring all female employees in the senior and emerging talent pools have an appropriate mentor; and reviewing the Group's flexible working policies.

Through our improved talent management and succession planning process (see 'Succession planning'), we achieved a 6% increase in females within our senior and emerging talent pools in 2012.

We will also continue to review our practices against best practice diversity programmes and initiatives.

Employee engagement
During 2012, we responded to discussion and focus groups at Group level and in our businesses, for example:

- In Australia, feedback enabled the management team to further develop their programme for fostering our Group Behaviours and to tailor their employee offering to retain employees.

- At Group level and in selected operations (including Brazil, Egypt and Australia) we asked focus groups about their understanding of our strategy. The response was positive but the groups asked for more clarification and for more visibility of senior leadership. We responded to this in a communication from the new Chief Executive and this was well received.
- We also did work to develop our employee value proposition (how we attract and retain top talent). Employees commented on our proposed approach, allowing us to tailor materials.

Following our 2010 Group-wide employee survey and our response to this in 2011, we took the decision to review our survey process. During 2012, we developed a new approach to measuring employee engagement called 'Your Voice'. We plan to implement this in 2013 and to incorporate a quarterly survey and a bi-annual quantitative employee opinion survey, as well as qualitative discussion and focus group input from around the world on key areas of local interest.

The quarterly surveys will ask three targeted questions to give immediate feedback on employees' overall levels of loyalty and commitment as well as on line managers' effectiveness. This survey will cover around 25% of employees, rather than the whole employee population. In 2013, we plan to run three targeted surveys and one in-depth survey. We also introduced new technology that will enable us analyse the survey results much more quickly and so enable us to respond to any issues in a timely way.

SAFETY

Overview

Safety is always our top priority. During 2012, we developed a new safety strategy, which reflects learning from previous years as well as priorities identified in 2012. It focuses on a number of key themes, including major accident hazards, contractor management, and safety leadership and culture.

We deeply regret that there were two fatalities in our operations in 2012 and our occupational safety performance as measured by the headline indicator of total recordable case frequency (TRCF) was disappointing at 2.26 against our 2012 target of 1.35. Underlying this in particular was poor safety performance in our largely contracted Queensland workforce.

Improving personal safety performance, particularly in Queensland, and strengthening relationships with our contractors were therefore priorities during the year and we put a range of initiatives in place to address these. Major accident hazards also remained a focus: we ran a Group-wide campaign to raise awareness of these hazards and continued to implement lessons arising from the BP Macondo Deepwater Horizon incident.

2012 safety performance

Fatalities

Tragically, there were two fatalities in our operations in 2012. A crew member of a support vessel was crushed while conducting *ad hoc* painting repairs while the vessel was moored in Aberdeen bay in Scotland. In our operations in Pennsylvania, USA, a contractor working on a construction activity was struck by a reversing vehicle. We participated in thorough investigations conducted into these incidents and reviewed recommendations developed to address the root causes. Any incident of this nature is deeply regrettable and every effort is made to ensure that the lessons are effectively communicated to the relevant areas of the organisation. Both incidents highlighted the importance of ensuring that procedures are clearly explained, well understood and put into practice.

Driving safely

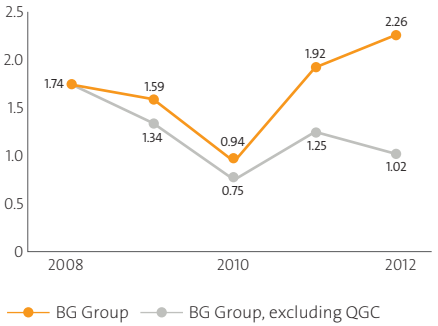
Driving is one of the key risks to our people at work. During 2012, many of our operations focused on improving driving safety. Among these were:

- Our operations in Kazakhstan ran a contractor road safety forum and developed a range of road safety plans, as well as holding weekly safety meetings and winter and summer safety stand-downs. They also implemented local road safety projects, such as installing new signage.
- Our operations in Tunisia launched a road safety campaign, including a dedicated week covering instruction; training in defensive driving, road safety alerts, journey management, and in-vehicle monitoring systems; and reinforcing positive behaviours through driving awards. The campaign featured international driving experts and speakers sharing their knowledge and experience with our Tunisia personnel, contractors and partners.
- Our head office in Reading, in the UK, ran a campaign focused on highlighting how driving is intrinsically linked to HSSE and ultimately to productivity. Over a month, a range of events took place, including tyre and vision checks, driving-related talks, and a driving exhibition.
- In Queensland, a strong focus on driving safety has continued. An approach has been built around three key elements: the driver, the vehicle and the journey. Drivers receive training, are drug and alcohol tested and are monitored through an in-vehicle monitoring system. Vehicles must meet standards and are fitted with monitoring systems and other safety features. A key feature of our driving approach in our pipeline operations is the Journey Management Centre, which provides 24-hour communication with drivers and monitors weather and roads.

Total recordable case frequency

Our occupational safety performance as measured by the headline indicator of total recordable case frequency (TRCF)[1], was disappointing at 2.26 against our 2012 target of 1.35.

Total recordable case frequency[(a)]
(per million work hours)



(a) Includes employees and contractors working on operated assets.

Underlying this result, in particular, was our safety performance in Queensland, Australia. TRCF performance here did improve significantly in 2012, down from 8.06 in 2011 to 6.39 (a reduction of 21%) and the severity of injuries arising was reduced. However, it still fell short of the internal target of 5.0.

[1] TRCF measures the total number of recordable safety incidents per million hours worked.

Our ability to ensure the largely contractor workforce operated consistently to the high safety standards we expect was challenged by a shortage of contractors with experience in working to oil and gas industry standards. This was due in particular to the ramp-up of activity in the state with three LNG projects (including ours) being constructed on Curtis Island and significant growth in both upstream drilling activity and pipeline construction work.

Therefore, while safety in Queensland did improve compared with the previous year, its TRCF remained significantly higher than the rest of the Group. In response to this, we have unified our approach to contractor management and safety leadership across our Queensland activities with increased focus on our basic safety requirements through a high-profile communications campaign. There has been improvement in performance but it is recognised that the required behavioural shifts will take time to take effect and impact the headline TRCF indicator.

The TRCF in our joint-venture unconventional gas business in the USA reduced significantly from 6.8 in 2011 to 3.2 in 2012 but did not have a material impact on the Group TRCF due to the reduced work activity level in this part of the business (from 5.2 million man hours in 2011 to 3.9 million man hours in 2012).

Excluding our operations in Queensland, the rest of the Group met its TRCF target in 2012, achieving a TRCF of 1.02.This would be top quartile performance as measured by the latest International Association of Oil and Gas Producers (OGP) benchmarking data. This performance underlines the strong commitment to improving performance and to embedding a strong safety culture.

The TRCF in our joint-venture unconventional gas business in the USA reduced significantly from 6.8 in 2011 to 3.2 in 2012 but did not have a material impact on the Group TRCF due to the reduced work activity level in this part of the business (from 5.3 million man hours in 2011 to 3.9 million man hours in 2012).

We also have Group leadership safety indicators, which are designed to reflect the engagement of senior management in safety. These indicators measure activities led or supported by management, for example, management tours, self-audits and contractor review meetings. All these indicators were ahead of target in 2012.

Major accident hazard training

During 2012, we worked on a specially developed innovative programme to raise awareness of major accident hazards (MAHs). This includes taking people to a dedicated site, Spadeadem in Cumbria. The programme includes technical presentations, demonstrations of various scenarios and the dramatisation of an actual major accident. To date, more than 350 personnel have participated in this training, including the most senior management. In 2012, Non-Executive Directors and members of the Sustainability Committee participated in a course to heighten their awareness of major accident risk. The Chairman of the Committee, Sir David Manning, noted that it was an excellent initiative and all Directors who had attended agreed that the course was an effective way to deepen understanding of the importance of MAH awareness.

Following a positive response to the training, we replicated it at the Queensland Combined Emergency Response Academy at Whyte Island, Brisbane in Queensland, where approximately 70 people were trained during 2012. We continue to hold regular sessions at both Spadeadam and Whyte Island.

We also ran a Group-wide campaign to raise awareness of MAH, sponsored by the Chief Financial Officer. This campaign resulted in several initiatives in our operations around the world, such as:

- Our operations in Kazakhstan and the USA developed new training material for subsequent use in local workshops. The management in Kazakhstan also attended a dedicated session.
- Our Trinidad and Tobago operations produced an e-learning module which was made available to all personnel via the Learning Management System.
- Our business in India ran a series of workshops that focused on behavioural aspects and used a live delivery of the dramatisation from the programme to stimulate discussions.
- Our head office in Reading, in the UK, ran a theatre-based workshop around a dramatisation of the major accident hazard awareness programme; this was also presented to graduates at their induction in 2013.

Major loss of primary containment incidents in 2012

A loss of primary containment (LOPC) incident is an incident involving an unintentional release of gas or liquid, for example through leakage or corrosion. These incidents are classified by severity, in line with industry[1] classifications, with Tier 1 being the most severe. In 2012, we recorded 18 Tier 1 incidents. All but two of the Tier 1 incidents were in transmission and distribution assets and were due to third-party damage of pipe networks. There were 45 Tier 2 incidents, all of which were either in transmission and distribution or unconventional gas operations which have a lower risk potential than conventional operations.

Response to the BP Macondo Deepwater Horizon incident

In 2010, in the wake of the BP Macondo Deepwater Horizon incident, we set up a task force to review our Group systems for preventing a similar incident.

In 2012, we continued to implement the recommendations from the review conducted by the task force in 2011. Specific actions were:

- embedding our blow-out risk assessment process, introduced in early 2011
- improving communications and behaviours on facilities, and improving the performance of drilling and service contractors
- Implementing a contractual change that empowers and requires the rig contractor to cease operations if it considers conditions to be abnormally hazardous
- reviewing our crisis communications as part of a review of crisis management capabilities
- increasing technical and non-technical focus on partner-operated activities, including enhanced assurance of operators' well plans and thorough review of contractual frameworks, including insurance, to assess and reduce potential liabilities in the event of an incident
- revising a number of our well engineering Standards and Guidelines to ensure they are embedded, and observed.

[1] API RP 754 Process Safety Performance Indicators for the refining and petrochemical industries; www.api.org (Tier 1 >1 500kg; Tier 2 >50kg <1 500kg for transmission and distribution operations).

As in 2011, we conducted joint audits with drilling contractors to assure they are working to our requirements and in compliance with their own safety management systems. One such audit identified gaps in training plans and emergency response procedures and these issues were addressed by the drilling contractor.

Participation in industry initiatives
We continued to participate in cross-industry initiatives including the International Oil and Gas Producers Association (OGP) three-year joint industry project on oil spill response. We are a funding participant, and sit on the project governance committee and a number of the technical workgroups.

A BG Group representative chaired the OGP Human Factors Task Force of the Wells Expert Committee during 2012. The Task Force recommended improvements to current well control training, and to the examination and certification processes. It also proposed related approaches that could be adopted throughout the industry to improve well control preparedness and performance.

We continued to be involved in the Subsea Well Response Project, an industry initiative set up in 2011 to design equipment to control a major well blow-out. During 2013, this initiative aims to deliver four globally deployable well capping devices and two subsea dispersant toolboxes for use by the wider industry.

Our own task force is no longer in place as the ongoing activities are now established where appropriate within the business in the relevant Group technical functions or in our operations.

For further information on these industry initiatives, please see:

http://www.ipieca.org
http://oilspillresponseproject.org
http://subseawellresponse.com
http://www.ogp.org.uk/committees/wells

Competence assurance
A key element of managing major accident risk is ensuring levels of competence. Our Competence Assurance Management System (CAMS) provides a systematic approach to establishing and developing competency levels of those in operational roles at a facility.

Since 2010, we have introduced CAMS across 11 of our operations, including some of our joint ventures. At the end of 2012, 92% of the operational facilities were on target against their planned completion programmes for the assessment of safety critical tasks.

This amounts to more than 57 000 individual assessments having been completed across all areas of our activity, including our exploration and production, LNG and shipping operations.

Assessments and re-assessments of competence continue at defined intervals for all safety critical tasks for as long as a facility is in operation. The CAMS programme has provided increased awareness of safety critical tasks being performed and more visibility of the associated training needs leading to structured training plans that support individual development.

Working with contractors
Working safely with contractors has become a key issue for the oil and gas industry in recent years. Contractors are a significant percentage of the industry's workforce and often perform highrisk activities. Like many other companies in our sector, we face the challenge of making sure our contractor workforce is fully aligned with our own safety standards. In 2012, the total tracked hours worked for BG Group was 119.7 million. Of those hours, 11.7 million were worked by BG Group employees (equating to our 2012 workforce of approximately 5 700 employees[1]).

The remainder of the hours were worked by direct BG Group contractors and joint-venture employees and contractors as well as non-operated businesses where we have an influence and therefore track safety.

The balance of these figures illustrates the significance of working safely in partnership with others.

The One Team approach
The One Team concept was introduced by our Chief Operating Officer in 2012 to address the challenge of contractor safety. One Team asks everyone working for and with BG Group to think of themselves as a team with a single purpose: to deliver our business plan safely. It is a way of thinking how we work with others inclusively and particularly how we can work more closely and more effectively in partnership with contractors.

We also introduced the Gold Hard Hat award scheme, a recognition programme for individuals who made outstanding contributions to safety. In 2012, there were 26 winners across the organisation, both employees and contractors, in a wide range of jobs. We publicise the achievements of the winners and also make a donation of $1 000 on behalf of each winner to a chosen local charity.

Key contracts
During 2012, we introduced a new Contracts and Procurement Standard. This sets minimum requirements associated with contractor selection and management and introduces a particular focus on key (high risk) contracts, providing more clarity on roles and accountabilities in managing such contracts.

We revised and simplified a number of tools and protocols and provided clear guidance on how to identify and manage key contracts.

The new Standard places particular emphasis on the importance of monitoring contractors' HSSE performance through regular reviews. It includes core HSSE key performance indicators that can be aggregated across operations, enabling us to discuss and compare performance. It also requires all key contracts to have a contract management plan, to ensure risks are managed throughout the contract period.

We are working to review the contract terms and conditions, including the HSSE requirements of a number of generic (model) contracts, to ensure these are appropriate to the scope of activity and reflect the key HSSE obligations of the contractor.

MARTIN HOUSTON
CHIEF OPERATING OFFICER

"I've been really pleased to see how the One Team message is resonating in our organisation. It is a simple concept but a powerful one that captures the essence of our shared responsibility for safety. When I see our team at work in our operations and in the field, I do not distinguish between contractor and employee – my expectations for everyone are the same: work safely, work together."

[1] 5 700 is the number of employees at year end.

A number of our operations held contractor forum sessions in 2012. These involved a significant number of contractor organisations in discussion on HSSE issues, with the aim of sharing learning and developing closer relationships.

Safety leadership and culture
During 2012, we developed our approach to safety leadership, in recognition of the changes at senior level as we have expanded. We have developed materials appropriate to each level of the organisation to support leaders in developing the skills they need to be successful.

In July 2012, we held a Global Safety Week to review progress against individual safety commitments made at the end of 2011 and to develop new personal commitments. Senior executives championed the global event and local operations ran a range of events, often with their contractor partners, reinforcing topics such as driving safety and intervention.

SECURITY

Overview
The risk of terrorism, criminal activity, piracy and other security challenges in a range of countries continued through 2012 and will, we believe, persist. During 2012, we strengthened the protection of our LNG fleet against the risk of piracy and monitored local security situations, notably in Egypt, developing appropriate plans and responding to incidents as required. We initiated security reviews in our North Africa operations in light of the January 2013 terrorist attack on the In Amenas gas installation in Algeria. We provided crisis management support in response to a gas leak on a non-operated North Sea platform, and identified lessons learnt. We reviewed our fraud risk management and information security arrangements.

Piracy
Our LNG vessels regularly pass through the Gulf of Aden, where there is a serious threat of piracy. Following a detailed threat and risk assessment, in 2012 we introduced vessel protection teams on board ships transiting the area. The teams act as a visible deterrent to piracy, respond to incidents and provide security advice to ships' masters. This is a defensive measure also taken by several other companies; we have not had any incidences of piracy to date. The vessel protection team approach builds on our physical vessel-hardening measures, crew training and co-ordination with the naval forces in the region.

Crisis management
Our crisis management plan was activated in April 2012, in response to an incident in the Total-operated Elgin Franklin field in the UK North Sea. This involved the uncontrolled release to the sea and atmosphere of 3 465 tonnes of gas condensate. The incident was handled by Total as operator but our crisis management team provided technical support and monitored the situation throughout. A post-event review confirmed that our crisis management plan worked well but lessons were learnt, for example, regarding training and availability of additional staff to enhance the resilience of incident management teams.

Crisis management preparedness has been strengthened in the past two years and has involved an annual crisis simulation exercise at our operations. We also trained and exercised three new Group-level teams in 2012, and conducted a joint exercise involving Group, regional and operational levels.

Information security
In common with many other organisations, our information systems face security threats from criminals, hackers and other perpetrators. Our Information Management and Security Steering Committee regularly reviews cyber and other information threats to ensure the mitigating measures we have put in place are fit for purpose.

Fraud risk management
In 2012, we conducted a review of fraud risk management across the Group which resulted in a number of recommendations. A steering group was set up to examine these recommendations, for example in the area of internal reporting structures, and to ensure that appropriate and timely action is taken.

SOCIO-ECONOMIC REPORTING

Overview
Transparent reporting was a much-debated issue in 2012, with the progress of new EU proposals that will require companies to report their taxation payments as a minimum on a country-by-country basis and, potentially, on a project-by-project basis. We participated in industry working groups on this issue and engaged with the UK government, the European Parliament and EU member states. While the debate about the best way forward continues, this report provides for the first time more information on the economic value we generate: an initial breakdown of our wage bill, social investment expenditure by country, and spending with local suppliers. We continued our support for the Extractive Industries Transparency Initiative (EITI) and provide a summary in this report of EITI reporting in countries where BG Group operates.

Transparency
Global companies, and particularly resources companies, are increasingly asked to provide information on the revenues they generate in a particular country. Publishing this information makes governments more accountable to citizens for how they use income from vital national resources.

We support transparency of this kind and follow regulatory and other developments closely. In Transparency International's report, Transparency in Corporate Reporting: Assessing the World's Largest Companies, we gained maximum scores in two of the three indices (anti-corruption programmes and organisational structure) although, like many of our peers, we do not report on a country-by-country basis and so scored less well in this area. We were ranked joint fifth overall out of 105 major publicly-listed companies.

2012 saw the trend towards more detailed reporting – in particular tax reporting – continue with a prospective requirement under the USA Dodd-Frank regulation and likely EU legislation for more detailed reporting of project revenues. As the Group is not a SEC-registered company in the USA, we will not be directly affected by this provision of the Dodd-Frank Act, but EU legislation is relevant and we closely followed the debate in 2012.

We were involved in industry working groups on this issue and engaged with the European Commission, the European Parliament, EU member state governments (particularly the British government) and civil society organisations on the scope of the relevant draft European Directive (Chapter 9 of the Accountancy Directive). During 2012, we also participated at a workshop on contract transparency in Johannesburg. This was set up to launch a work stream to develop an

"By adopting greater corporate transparency – publicly reporting on activities and operations – companies provide the necessary information for investors, journalists, activists and citizens to monitor their behaviour."

(Transparency in Corporate Reporting, Transparency International 2012)

integrated programme around contract transparency. We also held an internal workshop to review options for future reporting.

We advocate revenue transparency provisions that identify both the payer (that is, the company) and the recipient (that is, the level of government at which taxes are paid). We believe this will produce clear and meaningful information that can be used to hold governments to account for how revenue is paid. We do not support approaches that would require the provision of project-level data, which we believe would put companies required to disclose at a competitive disadvantage. We also believe the data would be difficult to interpret and so would not lead to improved transparency[1].

We will await the final outcome of the European Directive before taking any further steps to publish further information on our taxes paid. Once the Directive is published, it will be clearer what changes we need to make to our reporting systems, in order to comply.

Extractive Industries Transparency Initiative (EITI)

EITI is an international standard that asks companies and governments to disclose oil and gas revenues. We have supported EITI since its inception; we make a financial contribution to the EITI Secretariat in Oslo. We contributed $60 000 to EITI in 2012 and chair the Transparency Task Force of the International Association of Oil and Gas Producers (OGP).

As a corporation, the main way we contribute to EITI is to support its process in a particular country. This process, including reporting, is driven by EITI and not individual companies. Once EITI has set up in a particular country we, like other supporting companies, provide our data to EITI and this is reconciled and published. Once this data has been published, we can also provide this information in our Sustainability Report.

Currently, we have interests in six EITI implementing countries: Kazakhstan, Madagascar, Nigeria, Norway, Tanzania, and Trinidad and Tobago. However, we have no operations in Madagascar, which is currently suspended from the EITI process.

In Kazakhstan, we helped to establish EITI through contributing to the drafting of the memorandum of understanding and representing industry on the multi-stakeholder group. We provide data to the country process on an annual basis.

In Nigeria and Norway, we provide our data to the country processes and have re-published this data on our website. Since we entered Tanzania in 2010, we have worked with the Tanzania EITI Secretariat to understand the reporting requirements.

In Trinidad and Tobago, we are represented on the EITI Steering Committee and our representative also chairs the Legal and Tenders Sub-Committee, assisting with the review of relevant proposed legislation and contracts.

EITI REPORTING IN 2012 ($)

Country	EITI report published in 2012?	BG data available in report?	BG disclosure of total taxes paid	Government disclosure of total taxes received	Notes
Kazakhstan (2010)	Yes[a]	Yes	360 012 063[h]	360 012 063[h]	
Kazakhstan (2011)	Yes[b]	Yes	663 523 132[i]	663 523 132[i]	
Madagascar	Yes[c]	No	N/A	N/A	
Nigeria	No[d]	N/A	N/A	N/A	
Norway	Yes[e]	Yes	(15 930)	(14 721)	Report covers 2010. Discrepancy of 1 264[j] resolved
Tanzania	Yes[f]	No	N/A	N/A	Covers period up to June 2010 before BG entered the country
Trinidad and Tobago	No[g]	N/A	N/A	N/A	

[a] See Appendix 2, p22, 6th National Report, About Extractive Industry Transparency Initiative implementation in the Republic of Kazakhstan for 2010, published 20 July 2012
[b] See appendix 2, p24, 7th National Report, About Extractive Industry Transparency Initiative implementation in the Republic of Kazakhstan in 2011, published 20 July 2012
[c] http://eiti.org/Madagascar
[d] http://eiti.org/report/nigeria/2008
[e] See p35, p37, p41, p42 at http://eiti.org/files/Norway-2011-EITI-Report-Norwegian.pdf
[f] http://eiti.org/report/tanzania/2010
[g] http://eiti.org/TrinidadandTobago
[h] KZT 53 720 700 000
[i] KZT 94 010 518 000
[j] NK -852 503
[k] NK -787 830
[l] NK 67 673

[1] See the letter to the Financial Times signed by BG Group among other companies: 'Project-by-project reporting will not allow citizens to "follow the money"', Letters to the Editor FT, 6 June 2012.

Our economic contribution
In this year's report, for the first time, as well as providing a global overview of our economic contribution, we provide new information on employment, social investment and local content on a country-by-country basis.

The direct economic value we generated and distributed in 2012 and previous years is shown in the table below.

See our Financial Statements for more information.

Employment
The jobs that we provide represent a fundamental part of our economic contribution in the communities and countries where we work. It is our policy to create employment and development opportunities for people from local communities and the Group's Human Resources Policy supports equality and diversity. We now have interests in over 20 countries, and employees drawn from 72 nationalities; this diversity is a growing source of strength for the Group.

In 2012, 58% of our country management teams[1] were employed on local terms and conditions. This compares with 51% in 2011 and 50% in 2010. 32% of country management teams were nationals from non-OECD countries in 2012, compared with 32% in 2011 and 24% in 2010. The table below shows the split between local and non-local employees across our operations.

DIRECT ECONOMIC VALUE GENERATED ($ MILLION)

	2012	2011[a]	2010[a]	2009[a]	2008[a]
Revenue and other operating income	**19 200**	17 849	13 710	13 167	20 503
Total operating profit	**6 191**	6 977	4 879	5 202	9 603
Operating costs	**(11 358)**	(10 458)	(8 498)	(7 751)	(10 859)
Finance costs	**(114)**	(9)	(29)	(96)	211
Dividends paid	**847**	760	684	633	667
Taxation	**(3 057)**	(3 141)	(2 009)	(2 298)	(4 313)
Employee costs	**(1 338)**	(1 222)	(1 126)	(955)	(956)
Social investment	**27.2**	11.5	6	3.6	4

a Certain income statement items have been restated in respect of the presentation of discontinued operations. For further information see the 2012 BG Group annual Report and Accounts.

[1] Management team includes all direct reports to the country manager excluding administrative and support staff.

2012 BG GROUP WORKFORCE COMPOSITION BY COUNTRY

	Australia	Bolivia	Brazil	China	Egypt	India	Kazakhstan	Norway	Singapore	Tanzania	Thailand	Trinidad and Tobago	Tunisia	UK	USA	Global[a]	Others[b]	Group Total
Local employees[c]	929	72	169	15	181	301	59	57	28	24	13	408	383	1 359	334	0	602	4 934
Local employees on international assignment	31	4	25	3	14	51	7	12	3	0	1	31	16	435	82	64	0	779
Group total	960	76	194	18	195	352	66	69	31	24	14	439	399	1 794	416	64	602	5 713

[a] Employees on global contracts with no fixed location.
[b] This includes employees on contracts in locations not hosted on the central data system in 2012- Gaza (4), Italy (19), Chile and Uruguay (4), and subsidiary Gujarat Gas (575).
[c] Local employees are nationals of the country in question who are based in the country.

Infrastructure investments

We focus on building capability, rather than physical infrastructure. Investing in physical assets where we work can present challenges, as these assets must not only be built, but staffed, maintained and developed, and this requires a significant local commitment. If we build capability, we leave a legacy that is independent of our own physical presence. We do, however, invest in public infrastructure when this is required by our activities, for instance where a project needs a local access road. Such investment not only mitigates any impact we might have on existing infrastructure but may also create a long-term benefit.

For example, in Queensland, we have an A$9.3 million road infrastructure agreement covering roads used by QCLNG project traffic.

Also during 2012, our partner EXCO Resources worked with other local organisations to improve both roads and road infrastructure, including a traffic warning device in Lycoming County, Pennsylvania, where we operate. We also selectively invest in infrastructure that is unrelated to our own operations, through our social investment programmes.

Social investment[1]

Our strategy for investing in communities and societies where we work is to aim to focus on long-term investments, particularly large, multi-year projects and partnerships. We also aim to concentrate investment in three areas of strategic importance for us and the countries where we work: education, especially science technology, engineering and mathematics (STEM) education, skills development, and improving people's livelihoods. Excluding Australia, where a large proportion of our social investment spend is governed by our Social Impact Management Plan, 65% of our social investment spend was in these three areas.

In 2012, our total social investment spend (mandatory and voluntary) was $27.2 million, compared with $13.3 million in 2011[2]. Our voluntary social investment spend was approximately $25.4 million, compared with $11.5 million in 2011, an increase of 121%. A major part of this is due to the high social investment spend in Australia, which accounted for 68% of our total voluntary social investment spend.

SOCIAL INVESTMENT SPEND BY CATEGORY

Breakdown by category ($000)	2012	2011	2010	2009	2008
Charitable donations/ philanthropy	1 142	3 436	1 211	1 670	3 239
Local community investment	12 927	4 949	3 613	2 365	3 088
Regional development	5 606	2 617	1 030	828	632
Miscellaneous	5 757	481	474	712	1 211
Sub-total voluntary contributions [a]	25 432	11 484	6 328	5 575	8 170
Total mandatory social investment [b, c]	1 800	1 819	2 006	3 113	1 115
Total social investment contributions	27 232	13 303 [c]	8 334	8 668	9 285

[a] These figures include reported social investments in Tanzania and Thailand. While these operations are not wholly owned by BG Group, the social investments were 100% BG Group investments and so reported on this basis.
[b] In previous reports, we reported 'contractual obligations through production-sharing agreements.' This included mandatory social payments to governments, over which the company had no meaningful control. This year, we have narrowed the reporting criteria to 'mandatory social investment.' Whilst is mandatory, the group has full control over how such funds are spent.
[c] Spend under Kazakhstan contractual obligations (Kazakhstan Social Fund) was included in 2011 but has been excluded in 2012 due to the redefinition of this indicator (see footnote b above). On the 2011 basis, the 2012 figure would have been $15.3 million.

[1] Social investment is investment directed at communities affected by our operations and/or disadvantaged groups in wider society.
[2] See footnote [b] under table.

The majority of investment in 2012, as in the previous year, was in local community regional development and we supported both shorter-term and long-term development projects. As in previous years, the smallest part of our social investment spend was on charitable donations, less than 5%, as we continue to focus our social investment on theme-based spend and increasing our voluntary spend.

See more examples of our social investment projects.

SOCIAL INVESTMENT SPEND BY COUNTRY

Social investment spend ($) by country

	Australia	Brazil	Egypt	Kazakhstan	Tanzania	Trinidad and Tobago	Tunisia	UK	Other	Total
Voluntary [a]	17 330 885	1 815 871	207 884	733 966	845 671	925 023	1 232 300	1 423 568	916 555	25 431 723
Mandatory [b,c]	0	0	0	0	0	0	0	0	1 800 000	1 800 000
Total	17 330 885	1 815 871	207 884	733 966	845 671	925 023	1 232 300	1 423 568	2 716 555	25 231 723

[a] These figures include reported social investments in Tanzania and Thailand. While these operations are not wholly owned by BG Group, the social investments were 100% BG Group investments and so reported on this basis.

[b] In previous reports, we reported 'contractual obligations through production-sharing agreements.' This included mandatory social payments to governments, over which the company had no meaningful control. This year, we have narrowed the reporting criteria to 'mandatory social investment.' Whilst is mandatory, the group has full control over how such funds are spent.

[c] Spend under Kazakhstan contractual obligations (Kazakhstan Social Fund) was included in 2011 but has been excluded in 2012 due to the redefinition of this indicator (see footnote b above). On the 2011 basis, the 2012 figure would have been $15.3 million.

Local Content

Using local goods and services ('local content') rather than importing these is an important way in which we can support the development of countries where we work, and governments granting us licences may make it a requirement that we use a certain percentage of local content.

The table below sets out our invoiced gross spend with first-tier suppliers primarily in our operated Upstream[1] operations where we control the procurement process and contract directly with those suppliers. The data includes spend incurred on behalf of our joint-venture partners in those assets where our interests are less than 100%. Suppliers are classified as either local or foreign (to that particular operation) and the identification of spend associated with each classification has been derived from vendor request forms completed by our operations when they contract with a supplier. Local suppliers include locally registered operations of international companies.

The significant spend we incur in relation to non-operated or joint-venture Upstream operations where we do not control the procurement process, in particular in Brazil, Egypt, Kazakhstan, Thailand and the UK, is excluded. Spend in relation to the majority of our LNG and transmission and distribution businesses is also excluded. The invoiced gross spend data reproduced below is therefore not comprehensive and has not been audited. On this basis, we spent approximately $7.3 billion with local suppliers in 2012, compared with approximately $5.7 billion in 2011.

2012 GROSS EXPENDITURE WITH SUPPLIERS, BY COUNTRY ($ BILLION)

(primarily BG Group-operated upstream operations only)

	Australia	Brazil	India	Norway	Trinidad and Tobago	Tunisia	UK	USA	Other [a]	Total
Payments to suppliers	6.1	0.1	0.2	0.3	0.3	0.2	1.5	0.3	0.6	9.6
Of which, local suppliers	4.9	0.1	0.2	0.3	0.2	0.1	1.0	0.2	0.3	7.3

[a] Other includes: Algeria, Bolivia, Canada, China, Egypt, Kazakhstan, Kenya, Norway, Singapore, Tanzania, and Thailand

Our operations in Queensland have spent substantial amounts with local suppliers. Our six-monthly report to the Queensland regulator, published in November 2012, showed that since the start of 2010 we had invested more than $11 billion with about 76% of it going to Australian firms and about 61% to Queensland firms.

Overall, it is estimated that the Queensland Curtis LNG (QCLNG) project could boost the state economy by $33 billion over a 10-year period. It will create an average of 5000 jobs over the construction period and will employ around 1 000 permanent staff for operations.

We are creating opportunities for local employment and economic development through a variety of programmes, including connecting local suppliers and contractors through business expositions and supplier briefings, creating pathways for school students into the coal seam gas/LNG industries through a partnership with the Queensland Minerals and Energy Academy, and educating local businesses about QCLNG project standards and processes.

We also work with indigenous businesses in Queensland to build business capacity to participate in the QCLNG supply chain.

[1] During 2012, BG Group reorganised its business segments. E&P segment was combined with the liquefaction operations associated with integrated LNG projects, previously included in the LNG segment. These now form the Upstream business segment. The remaining businesses comprising the LNG segment, primarily encompassing the marketing and optimisation of LNG, and including interests in regasification plants, have been renamed 'LNG Shipping & Marketing'.

UNCONVENTIONAL GAS

Overview

Public debate about the environmental impact of unconventional gas (gas trapped in rocks such as shale) – continued during 2012. We produce gas from shale in the USA and from coal seams in Queensland. During the year, we continued to monitor and respond to stakeholder concerns, particularly in the communities where we work, while also working with regulators and industry on initiatives designed to strengthen the industry's framework and reduce its environmental impact. We made progress against our eight principles for operating in unconventional gas which we set out in a public position in 2011, and updated in 2012. Key areas of progress were: community engagement in Queensland, responsible chemicals use and emissions management in the USA, and water management in both Queensland and the USA.

Public Position

We recognise we can only be successful in producing shale and coal seam gas if, as well as achieving commercial goals, we fulfil the social and environmental expectations of regulation and of stakeholders, in particular the local communities where we operate.

In February 2011, we became one of the first companies to publish our approach to developing and producing unconventional gas, when we posted our eight key principles for responsible working on our website.

These principles reflected research and stakeholder consultation and were mapped against a number of reports identifying principles for responsible working.[1] They set out key areas for future progress. During 2012, we took action in a number of these areas and reported this in an update to the Public Position.

Key areas of progress in 2012 were:

- community engagement in Queensland, where the business secured approval for its Social Impact Management Plan, opened new regional information centres and invested in a wide range of community projects
- responsible chemicals use in the USA, where the Group started market and field research into environmentally preferable solutions for hydraulic fracturing
- water management in Queensland and the USA; in Queensland we progressed work on three state-of-the-art reverse osmosis plants which will treat up to 97% of produced water. In the USA, we invested US$320 000 in field trials of water treatment technologies
- emissions management: in the USA we introduced 'green completion' technology as standard for all wells and started work with partners on a major University of Texas study to provide reliable estimates of leakage rates during unconventional gas production, as well as setting up an internal energy efficiency and emissions study to look at fugitive emissions from pipelines.

WATER

Overview

During the year, we agreed a new Group water strategy, building on the water management plan introduced in 2011. Our operations took a range of actions to improve water management during the year.

In Queensland, we made progress with our investment in state-of-the-art reverse osmosis plants to treat the water we produce. We reviewed our water management approach in Egypt, and in the USA, and we ran field trials of new water solutions. We worked with Texas A&M University and other partners to trial new technologies as well as participating in a US Environmental Protection Agency study looking at the potential impacts on drinking water resources from hydraulic fracturing.

Water strategy

During 2012, we continued to take action on water management as reported in 2011. We also finalised our Group water strategy which was approved by the Board in July 2012 (and was developed from the water management plan launched in 2011).

This strategy sets out our aspiration to achieve excellence in water management, supported by initiatives in three areas:

- investing in people and skills development to ensure water issues are effectively managed
- improving water management through new technology, using best available techniques and better risk management and reporting
- engaging with stakeholders at asset and strategic levels.

The strategy aims to ensure that we develop appropriate local water management plans. It requires all our operations with potential water management issues to carry out water risk assessments covering factors such as water scarcity, water quality, disposal options, volumes of water required, potential impacts on other water users, and the potential impacts on operations as a result of local water availability and quality.

Operations with significant water risks are required to develop water management plans which assess the risks and describe how they will mitigate them. Specific water management requirements for our operations will be included in the next update to the Group Environmental Standard. Our water specialists have developed guidance that outlines how local teams should implement the requirements of the water strategy.

Reducing the impact of fracturing chemicals

Hydraulic fracturing – a technology we use to extract natural gas from shale, coal seams or other rock formations – uses chemicals for various purposes, such as reducing bacteria growth in the well. We have a goal of minimising the potential impact of hydraulic fracturing chemicals and have been working with suppliers to seek solutions that are still effective but have a lower potential environmental impact.

During 2012, we started market and field research to this end. One aim is to discover alternatives to the traditional biocides that are used to kill bacteria in water. In Texas and Louisiana, our joint venture partner EXCO Resources conducted field trials, financed by our Technology Fund, which used chlorine dioxide (essentially the same chemical used in water treatment plants) instead of traditional biocides. This is an equally effective approach to killing bacteria.

[1] For instance, the US Secretary of Energy's Advisory Board 90 Day Report, the International Energy Agency's "Golden Rules for a Golden Age of Gas" and the US Investors' Environmental Health Network's "Extracting the Facts".

We disclose information on the chemicals we use on FracFocus, the hydraulic fracturing chemical registry website: htttp://fracfocus.org

Recycling produced water
In Pennsylvania, we are examining treatment technologies for the large volumes of fluid (typically water) produced during the hydraulic fracturing process. The volumes of this 'produced' water can be significant and can contain fluids and minerals from underground that must be managed or disposed of responsibly. While this water can be safely trucked off site for disposal, being able to recycle or reuse it – and so save resources and cost – is increasingly being seen as best practice.

At present, our joint-venture operations in Pennsylvania reuse 100% of the water initially produced after fracturing.[1]

Technologies for water treatment
We are also working with Texas A&M University and various technology providers to examine and trial technology options, such as microfiltration, and the use of membrane technologies and ozone precipitation water treatment technology. All these technologies were trialled where we work in Pennsylvania.

These are well-known methods of water treatment, but their application is highly dependent on the specific location and the level of water quality that needs to be achieved and they had not been trialled in this geography or with this water type before. The trials were concluded during 2012.

Understanding water risks
We are also participating in a US Environmental Protection Agency study looking at the potential impacts on drinking water resources from hydraulic fracturing.

In 2012, we participated in a technical round table that formed part of an Environmental Protection Agency research initiative into water management for shale gas.

During 2012, we were also one of a group of companies that are working together to understand water-related risks better. An initial research phase will identify gaps and opportunities for improvement in current operational practices in the USA, after which it is expected that the project will expand and involve external stakeholders. Further work will be planned for 2013.

Other water investments and technology
We are seeking to minimise the impact of our operations on water in other regions. Field trials designed to reduce the amount of oil in the water we discharge were conducted offshore India in 2012 and a technology project looking at water quality objectives for overboard discharges in Trinidad and Tobago began during the year.

We are also investing in eight nanotechnology research projects that are focused principally on water management. The research will include work on topics such as cleaning produced water, reducing the use of biocides and treating organic contaminants. The initiative is a joint effort involving Brazilian and American researchers, established through a research agreement between RICE University in Houston and the University of Santa Catarina in Brazil. It will continue over the next four years.

In Thailand, investments have created a water treatment and re-injection facility which results in zero disposal of produced water overboard. The project provides a good demonstration of the application of Best Available Techniques (BAT) and won one of the BG Group Chairman's Awards – annual awards given for excellence in health, safety, environment and social performance.

Queensland
Water is a vitally important resource in Queensland, where agriculture is a major contributor to the economy. Managing the water produced during the coal seam gas process responsibly is critical for our future licence to operate.

Egypt
Managing the risks associated with the disposal of produced water from our operations in Egypt is a major challenge.

At present, we truck waste water produced by our offshore operations to an onshore treatment site. During 2012, we looked at ways to minimise the risk and impact associated with trucking, including improving our trucking contract or outsourcing.

We also looked at longer-term alternatives for managing waste water and are considering five options: biological treatment; the use of heated ponds; water injection; evaporation; and enhancing and continuing trucking of water. We expect to make a decision on the chosen option in 2013.

USA
In the USA, we develop and produce shale gas in two regions: in Pennsylvania and West Virginia, and in Texas and Louisiana.

Read more about hydraulic fracturing and water:

http://www.bg-group.com/OurBusiness/OurBusiness/Pages/UnconventionalGasResources_shalegas.aspx

WORKING WITH COMMUNITIES

Overview
We continued to implement our long-term strategy of managing social impacts and working with and investing in communities. We established a grievance management mechanism in our Queensland operations and are developing one in Tanzania. In Trinidad and Tobago, we delivered a programme to manage our impact on and relationship with fishing communities. We strengthened our work in science, technology, engineering and mathematics (STEM) education in Brazil and the UK and participated informal Rio+20 conference sessions on STEM education partnerships. In Queensland, we launched several new programmes to create long-term employment and business development opportunities for indigenous people and to offset the impacts of our construction work by building affordable housing in Gladstone. In North Africa, implementation of the programmes we designed to respond to the issues and expectations triggered by the Arab Spring was slower than anticipated.

SOCIAL INVESTMENT

In 2012, we invested a total of $27.2 million in social projects across the world, where possible focusing on investments related to vocational training, livelihoods development and education, especially STEM education.

[1] These operations are not operated by BG Group but by our joint-venture partner, EXCO Resources. Figures are therefore not included in Group figures.

North Africa
In our 2011 Sustainability Report we recognised the far-reaching significance of the Arab Spring and more specifically the revolutions in Egypt and Tunisia. While the initial impact of the Arab Spring subsided in 2012, political and social instability persisted in these countries and presented challenges for our business and social investment plans.

Our social investment strategy in Egypt and Tunisia focuses on vocational training, and skills and livelihoods development. In 2012, we strengthened our social investment strategy in both countries to respond to two inter-related underlying drivers of unrest: high local unemployment and an absence of the skills that would make local people employable in industry.

However, during 2012, implementation of our strategy was slower than anticipated in both countries, largely due to external factors and interruptions at the local community level.

Egypt

We produce gas offshore the Nile Delta and have a share in the Egyptian LNG facilities, located at the LNG port facility at Idku, on Egypt's Mediterranean coast.

The community where we work in Idku has become increasingly concerned about local benefits and long-term legacy issues. Securing and maintaining a social licence to operate is an important objective for us and other companies working in the area.

As a result, shortly before the uprisings in Egypt, we and our joint-venture partners set up a social performance collaboration forum to ensure a joint social investment and community approach. We run the forum which is attended by the chief executives or managing directors of the participating companies.

Our social investment strategy in Egypt is to build a portfolio of complementary projects to develop skills for employment and enhance livelihoods. It aims to deliver programmes, targeted at three priority stakeholder groups (unemployed youth in Idku, fishermen and their families, and small-scale farmers). These programmes will be delivered through partnerships with experienced international and local development organisations with a track record of delivery and a long operating history in Egypt.

However, progress in executing the strategy has been slow. The government demanded a halt on community engagement activities in Idku for several months into 2012, preventing companies from implementing any social investment project until April. The development of partnership agreements also took longer than envisaged.

In December 2012, the Idku forum finalised a three-year partnership with ACDI/VOCA, a leading agribusiness non-governmental organisation (NGO), to run a sustainable livelihoods programme targeting the poorest segments of the Idku population and those affected by gas industry operations in the area. Implementation of this programme is due to start with a pilot project in 2013.

Tunisia

We are the largest producer of gas in Tunisia, supplying more than 60% of the country's domestic gas production. We operate offshore and have onshore facilities on the Tunisian coast between La Skhira and Sfax.

Unemployment in Sfax is high, with near-subsistence agriculture and fishing providing few opportunities for young people. Local demand for employment with us far outstrips the jobs available and this can lead to tensions. We recognised this was an important issue to address and in 2009, set up our Sustainable Livelihoods programme to help local people find new ways of supporting themselves.

In 2011, the Arab Spring brought further social unrest. At the height of the crisis, local people picketed outside our plant and held protests over labour and community concerns.

Micro-finance
Our Sustainable Livelihoods programme provides micro-finance loans and vocational training for local people. However, we have temporarily stopped our micro-credit programme since the revolution due to payback rates falling close to zero. This was largely due to the fact that in March 2011, a key governance control requiring loan applications to be backed by a guarantor was waived.

Vocational training
Since the beginning of the project in 2010, we have placed 170 students in vocational training; of these, 20 had graduated by end 2012.

For 2013, the target is to enrol 70 new students in the programme. In 2013, we will monitor the first batch of students who graduated in 2012, to determine if they secure full-time employment, continue vocational training on the four-year course, or do not find employment or training.

Graduate entrepreneurship
Through much of 2012, we continued to implement our graduate entrepreneurship programme. This is an initiative through which we support local graduates, via the Sfax business centre, to set up small and medium-sized businesses, providing funding and technical support. The Tunisian Solidarity Bank also provides a capital sum to the graduates.

The programme was launched in November 2011. The Tunisian Solidarity Bank will grant viable projects a loan and we will cover the entrepreneurs' deposits. We have also committed to providing general technical assistance to the project, including putting together a database on the available education in the region.

The targets for the whole period (over three years) are: $350 000 of loans disbursed, 240 graduates enrolled and 60 loans disbursed.

In addition, we are developing plans to build capacity at the Sfax Business Centre, working with a suitable international partner.

Community infrastructure
We signed a memorandum of understanding with the local government on a community infrastructure programme targeted at upgrading the Nakta Health Centre and improving facilities in five schools in the Gargour region, near to Sfax. Both projects were designed throughout 2012 with input from community consultation programmes and will be implemented in 2013.

Charitable donations
In 2013, our social investment programme will continue to support small-scale charitable donations, including a local health programme, and donations of school supplies to pupils in the communities around our Hannibal plant.

Science, technology, engineering and mathematics (STEM)
STEM is one of three social investment themes for BG Group. In 2012, we made progress with key STEM investments in Brazil, and the UK.

STEM in Brazil

Our Brazil sustainability strategy, launched in 2011, aims to ensure our long-term contribution to Brazilian society and to the economy. During the year, we launched a major programme of social investment, focused on STEM, a particularly important theme in Brazil and a key element of our sustainability strategy and social investment. We are investing $1.7 million to support STEM education right through the education system and into vocational training.

STEM in the UK

We are committed to supporting STEM education in the UK and the many countries where we do business. In partnership with recognised STEM delivery organisations, we contribute to building a STEM-educated workforce and provide opportunities for students from under-represented backgrounds.

We chose the UK as an initial focus country for our STEM education work (along with Brazil), reflecting our business presence in the UK, the work undertaken in this area by certain leading UK educational institutes and the opportunities to leverage the UK STEM programme to benefit our international business.

In 2012, we spent approximately $1.8 million on STEM programmes in the UK. Two key achievements are summarised below.

Geo and marine science summer school – achievements in 2012
We ran our first BG Group summer school, in partnership with Exscitec, Imperial College and the National Oceanography Centre Southampton (NOCS) at the University of Southampton. The five-day residential summer school provided 60 students from maintained schools with a practical science experience in the fields of geoscience and marine biology.

This project was supported by recent research evidence from the Sutton Trust (an organisation that aims to improve educational opportunities for young people from non-privileged backgrounds and to increase social mobility). This research highlights residential summer schools as a key approach to inspire students to study STEM subjects and broaden their educational and career horizons.

A key element of our summer school was the opportunity for hands-on experience of geo and marine science, including a trip on the NOCS marine research vessel and a geology field trip to the Isle of Wight – a highlight for many of the students who had not previously had the chance to experience practical science in the natural environment.

Partnership with the Science Museum, London
In 2012, we agreed a new partnership for STEM education and employee engagement with the Science Museum, London.

The core of the partnership is the Building Bridges project that builds on the Museum's extensive experience in engaging with young people, teachers and parents. The project will initially be delivered in 20 state maintained schools in London, to build scientific literacy amongst Year 7 students and help them understand how science shapes their lives.

The project engages students, parents and teachers through school-based outreach, Science Museum visits, workshops and a family celebration event at the Museum. The impact of this multi-dimensional approach will be monitored through research collaboration with the Sheffield Hallam University Centre for Science Education. This relationship brings a number of opportunities for our employees to volunteer as well as the direct benefits for schools and young people.

Employee engagement
Our STEM-related employee engagement and volunteering grew in 2012. We have more than 20 BG Group STEM ambassadors now registered and over 50 people are signed up to our online STEM community, which was established in September 2012.

During 2012, we launched the BG Group Energy Islands Programme; this programme is being delivered through Exscitec and is targeted at 100 Year 9/Key Stage 3 pupils and their science teachers from 10 state-maintained schools (5 London and 5 Reading schools). Over the course of 6 months, the programme will deliver a series of after-school science club activities focusing on energy efficiency and CO_2 emissions reduction related questions.

Our portfolio of activities and our work with the partner schools is now generating targeted opportunities for involvement. An Energetic Gas module developed for the Energy Islands programme, an afterschool science programme, will soon also be made available for our ambassadors to use in their individual engagements in STEM outreach work.

Staff communication has stepped up through our internal magazine and intranet. We also produced information covering STEM activities in the UK.

UK-Brazil STEM visit
In October 2012, BG Group hosted a UK-Brazil STEM education exchange visit in London, in partnership with the Science Learning Centre London. We invited Brazilian STEM education practitioners and researchers – many of them partners in our Brazilian STEM education programme.

The objective of the visit was to allow sharing of experiences and to build connections between UK and Brazilian STEM education practitioners and researchers, through a combination of presentations, discussion sessions, and external visits. This programme gave a good overview of the challenges and opportunities in UK and Brazilian STEM education sectors and encouraged discussion of collaboration opportunities.

The exchange visit was well received by Brazilian and UK participants and follow-up collaborations are being explored. It highlights the opportunity for further international information sharing and collaboration across our STEM education portfolio.

Social programmes in Australia, Tanzania and Trinidad and Tobago
During 2012, we continued to run a range of community programmes in Queensland, Australia, in partnership with local organisations. These included programmes aimed at building indigenous employment, skills development and business capability.We have eight indigenous land use agreements with fifteen traditional owners in our area of operations in Queensland. These commit us to developing and implementing an indigenous employment and training strategy and programme with these owners and the broader Aboriginal community.

Indigenous employment with QGC and QGC contractors increased 365% in 2012, in entry-level and professional roles with QGC and QGC contractors largely in the fields of drilling, construction, civil construction, security, camp management and corporate services.

In Tanzania, we continued to develop our social investment programme, which links training and skills development with employment. It focuses on education, vocational training, livelihoods and marine conservation.

In Trinidad and Tobago, we continued to work to manage our impact on fishing communities affected by our offshore operations, aiming to help compensate for any impact on their livelihoods.

Australia
Our Social Impact Management Plan (SIMP) sets the framework for how we work in Queensland. It makes around 90 commitments to communities from the Surat Basin to Gladstone, including investing $153 million. The areas we support include: indigenous participation; housing; community health, safety and social infrastructure; land use management; employment and economic development; and road and marine traffic management.

Implementation progressed well during 2012 as we worked with local partners and organisations across the region. We contributed more than $17 million in community investment and development projects in total.

Trinidad and Tobago

We explore for and produce gas in the East and North Coast Marine Areas off the coast of Trinidad and Tobago. When we are exploring for and producing gas, we routinely collect marine seismic data to be able to understand the sub-sea environment. This has raised concerns among local fishing communities over exclusion zones and the potential impact of the gas business on their livelihoods.

During 2011, we conducted a social impact assessment on the east coast to look at the impact of our activity on fishing and on communities. We did this by working and consulting with the local communities. As a result of this work, in 2012 we were able to strengthen our relationships with communities, providing financial compensation to those affected and also exploring options for other kinds of compensation – for instance, helping to improve safety at sea for fishermen. We also worked with state agencies to develop a community-based fisheries management model for the east coast of the island and with other operators and the Ministry of Energy and Energy Affairs to finalise seismic compensatory guidelines.

Tanzania

We entered Tanzania in 2010 and operate three blocks offshore. We are acutely conscious of the importance of managing our presence in this relatively new market in a way that will ensure long-term benefit, not just for our business but for the country. In Tanzania, there have been high expectations of the contribution that the development of natural resources will bring in building the country's future. We aim to make a positive contribution while managing expectations to realistic levels.

In 2012, we built on our early work with communities in Mtwara (where our supply base is located) and in Dar es Salaam by expanding our community relations team, and working to establish partnerships focusing on developing skills, livelihoods and conservation. We have tried to ensure communities, local government and other stakeholders have access to information about our activities and that we can participate effectively in the local community.

We also began socio-economic mapping in relation to a potential LNG development on the southern coast. Our work has allowed us to gain valuable experience in interacting with local government, and community, donor and NGO groups. We have tested impact management strategies and developed social investment programmes that address local priorities.

Social investment strategy

Our social investment strategy in Tanzania is based on contributing to the country's development goals and building wide support for the development of an LNG project.

The social investment programme we have in place links training and skills development with employment. It focuses on education, vocational training, livelihoods and marine conservation.

Our approach is based on clearly defined criteria and objectives. It combines long-term community development and capacity-building projects (which represents most of what we will spend in Mtwara), with charitable donations in Mtwara and Dar es Salaam. All our long-term projects (summarised below) are undertaken with local, national and international organisations, and in consultation with local government. Support for local and national capacity-building is built into the partnerships we establish with international organisations. Our charitable donations have supported a road safety initiative in Mtwara in partnership with the National Institute for Transport; the provision of 600 school desks to local primary schools, and the distribution of school books in Mtwara and Dar es Salaam.

Support for higher education

Through the British Council, we funded two scholarships for Tanzanian students to study for MSc degrees in geosciences, petroleum or mechanical engineering at UK universities. The programme will continue to support the development of a cadre of highly qualified scientists and engineers. The first two students began their studies at the Universities of Newcastle and Dundee in September 2012.

We have donated education and technical equipment to the University of Dar es Salaam's Department of Geology and the University of Dodoma's Department of Petroleum and Energy Engineering. We are also funding four scholarships for Tanzanian students wishing to study to Masters or PhD level at the Nelson Mandela Arusha Institute of Science and Technology. We are in discussion with the African Development Bank to lead an oil and gas sector pilot project as part of their higher education programme.

Vocational training in Mtwara

In July 2012, we launched a project with the Vocational Education Training Authority (VETA) and Voluntary Services Overseas (VSO) to improve the employability of young people in the Mtwara region, focusing on the oil and gas industry and related services. The three-year, $1.05m project will improve vocational training skills and help young people become more employable by raising standards for craftsmanship skills and by promoting VETA Mtwara as a centre of excellence for training.

It is expected to benefit at least 280 students, who will earn internationally recognised certificates in their trades by 2014. Qualified VSO volunteers are coaching VETA trainers on a one-to-one basis to qualify as UK university accredited and certified tutors. English language training has been provided by the British Council. The UK-based Leicester College is also providing quality assurance and supporting the international accreditation process.

Marine conservation and coastal livelihoods
We support the Mnazi Bay Ruvuma Estuary Marine Park, which is located south of Mtwara Town. In 2011, we donated a glass bottom boat to the Park to help it generate income and we supported programmes to replace illegal fishing nets and improve park monitoring. In 2012, we developed our relationship by establishing a partnership with the Aga Khan Foundation in Tanzania to develop a long-term livelihoods and conservation programme.

Community relations and a grievance mechanism in Mtwara
In 2012, we began work to establish a grievance mechanism so that the community can air concerns with the Group in a way that gives them confidence their concerns will be addressed. The mechanism will allow us to establish whether an issue is related to us, one of our suppliers, or another company altogether. It will enable us to investigate and respond to grievances in a timely, transparent and fair way, in line with industry good practice. An international expert, supported by IPIECA, is helping develop our approach. In 2013, we plan to open a community relations office in Mtwara and will continue to engage with local stakeholders.

Partnerships
We continued to foster active partnerships with organisations that share our approach to responsible social performance. These included the Centre for Social Responsibility in Mining at the University of Queensland and the International Business Leaders Forum. We also forged a new partnership with the London Science Museum.

COUNTRY PROFILES

BRAZIL: BUILDING AN ENDURING LEGACY

We were one of the first foreign companies to take an interest in Brazil, entering the country in 1994 to help build a $2 billion gas pipeline between Bolivia and Brazil.

Today, our investment in Brazil is significant, in scale and strategic importance, for our future portfolio: Brazil offers significant reserves and ease of access to world crude markets. We have already invested more than $5 billion in Brazil and have a multi-billion dollar investment programme in place.

We also expect to play an important role in Brazil's development. By the end of 2013, we expect to be the second largest company by production after Petrobras, the Brazilian state oil company, and expect to be the largest foreign investor in the country by 2025.

Our interests in Brazil lie in the Santos Basin, where we work in partnership with Petrobras and other companies through joint-operating agreements. The fields in the Santos Basin lie in deep water of approximately 2 100 metres and a further 4 000 metres below the sea bed. The fields are due to come on stream progressively over the period to 2018.

In the third quarter of 2012, the Group received independent certification of the reserves and resources of its five major Santos Basin discoveries to be between 4 and 8 billion barrels of oil equivalent. Our first commercial production in Brazil began in October 2010, when the Lula field came onstream.

Petrobras is the developer and operator for all the Brazilian acreage in which we have interests but we cooperate closely on development, engineering and production. In 2012, Petrobras' research and development specialists and our technology centre signed a technology cooperation agreement to facilitate projects in well engineering.

Our sustainability strategy in Brazil

The Brazilian government has clearly set out its objective of ensuring that profits from oil and gas are used to develop an internationally competitive knowledge-based economy, with investments in high-quality jobs, and science and technology and related businesses. We recognise our role in supporting the country's long-term objectives and contributing to durable success. A research and development (R&D) levy requires BG Group to invest 1% of its gross production revenue from Brazilian fields that have an obligation to pay special participation, on R&D in Brazil.

We aim to ensure our investment delivers value not just for us and our shareholders but also for our partners in Brazil, the Brazilian government and for those communities directly affected by our developments.

Ensuring that our developments are sustainable and meet the needs of stakeholders has been a priority since our first entry into the Brazilian market.

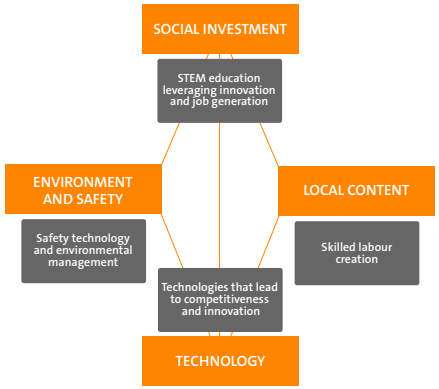
As a key foreign investor active in Brazil, it is vital that we build effective relationships with local stakeholders, as well as Petrobras, ANP (the national oil and gas agency), the federal and state governments and oil and gas industry associations.

We defined sustainability as an integral part of our business in Brazil from the outset, and, in 2011, put in place a formal sustainability strategy designed to ensure the business would provide enduring benefit to Brazilian society. This strategy, endorsed by the Board, was drawn up after extensive consultation to support national priorities. It has four goals or pillars:

- social investment
- environment and safety
- technology
- local content.

These four areas mutually support each other to create an integrated sustainability approach, as can be seen in the diagram below.

Brazil sustainability strategy



For instance, the oil and gas research we support and manage can lead to new business ideas, increased competitiveness and the growth of small and medium-sized businesses. Some of these ideas may also result in health, safety, security and environment (HSSE) benefits. Similarly, our investment in science, technology, engineering and mathematics (STEM) education will provide skilled people to enter the local labour market thus creating a virtuous circle. By partnering with local companies on technology projects, meanwhile, we can promote knowledge transfer and local capability development. We work to ensure our sustainability and our technology strategies are integrated in Brazil, to help us capture this type of benefit.

Local content

Building local content – increasing the supply of internationally competitive, locally produced products and services to the oil and gas industry's capital projects – is a focus for our sustainability strategy. There are a number of opportunities to develop new businesses linked to new technologies. For example, composite risers – using lighter, easier and cheaper materials – are being developed in Brazil for use by companies operating locally. Our adoption of the CaDFor system, which pulls together information on domestic suppliers for the oil and gas industry, is proving valuable by promoting the exchange of vendor information on capability and resources – of use not only to us but to the sector as a whole.

We are also investing in skills and in vocational training in the regions where the local shipyards are building our floating production, storage and offloading (FPSO) vessels and working with the local municipality, Petrobras and others to make sure there is not only training but also the possibility of jobs.

Global Technology Centre
Research and development is central to our sustainability strategy in Brazil. In view of this, and our significant investment in Brazil, we took the decision to build a Global Technology Centre in the country. While BG Group Technology has been based in Brazil since 2011, this new purpose-built centre will coordinate our global technology research and development activities. Construction of the centre is underway and is expected to be completed in 2014.

The aim of the centre – which will be located near the Rio de Janeiro Federal University – is to be a world-class centre for oil and gas research, leveraging local technology capability and also attracting technology skills to Brazil. It will coordinate research and development investments to address BG Group technology challenges, in partnership with universities and other organisations with an interest in technology development. We expect to invest $1.5-2 billion in research and development by 2025.[1]

We are already helping to promote international partnerships with Brazilian universities such as a partnership between the Federal University of Rio Grande do Sul (UFRGS) and Aberdeen University in Scotland, set up and facilitated by BG Group. For example, at UFRGS, a seismic interpretation project to study the Campos and Santos basins was undertaken in 2012.

Science without Borders
The Science without Borders programme is a Brazilian government initiative that promotes the consolidation, expansion and internationalisation of science and technology, innovation and competitiveness by organising and funding scholarships and exchanges between Brazilian and international researchers. This flagship initiative aims to send 100 000 Brazilian fellows to world-class international universities over the next four years.[2]

We are supporting Science without Borders by sponsoring selected students working on projects relevant to our business, through our own Fellowship programme. At the Rio+20 Conference in June 2012, we announced funding support for this Fellowship programme of up to $100 million for scholarships that will fund doctoral and post-doctoral students for up to four years in prestigious foreign educational institutions.

Through the Fellowship programme, we will collaborate with Science without Borders to fund PhD students and post-doctoral researchers to work with first-rate universities around the world to develop world-class research in support of our technology strategy. It should also drive new enterprises and help Brazil's growth and internationalisation. Students benefiting from the project must return to Brazil so that the connections and experience they have gained flow back into the local economy.

Commenting on the launch of the fellowships, Nelson Silva, President of BG Brasil said: "These extraordinary fellowships will harness Brazil's best technical talent and create international scientific research which will bring benefits not only to the academic community but to businesses and the wider Brazilian society. This is about building a long-term knowledge economy in Brazil that will continue to attract international investment and grow sustainably."

Open innovation
We have adopted an open innovation model (working with partners and sharing ideas) when engaging with Brazilian universities. A recent workshop with the São Paolo Research Foundation (FAPESP) explored possibilities for innovative gas technologies, and resulted in plans to launch an open tender for research projects in the field of gas utilisation. Similar initiatives have been planned in the area of energy efficiency.

Supporting science, technology, engineering and mathematics education (STEM)
A key theme of our social investment strategy is furthering STEM education.

STEM in Brazil is an important part of this worldwide support and is the focus of our work to support local communities. In June 2012, we hosted a major public debate on science and education at Rio+20, attended by many of the leading figures in this field in Brazil.

The objective of our STEM investment is to support Brazil's goal of strengthening STEM capabilities right through the public education system, from early schooling through to vocational training, to prepare individuals for work, in particular with the job opportunities offered by the oil and gas industry.

The STEM initiative starts by targeting young children through the provision of an innovative methodology and training for coaches. At primary school level, partnerships with local governments to promote STEM education at selected municipal schools have established a base for evaluation and could be adopted as a model for future initiatives. At secondary level, with the state government of Rio de Janeiro, we have set up education projects. We are also providing vocational training – focusing on technical skills that are in high demand – to people from local and disadvantaged communities. These initiatives are being managed in close coordination with contractors and local government to maximise job opportunities.

Over time, this investment in schools and public education should result in a larger and better-prepared pool of people seeking science or research-related jobs and so contribute to broader social and economic development.

To date, STEM investments have been made in Rio Grande and Angra dos Reis, where the two main shipyards constructing and assembling our FPSOs are located. By working in partnership with Brazilian institutes, non-governmental organisations (NGOs) and training agencies to implement STEM programmes, we aim to align our approach with the official Brazilian STEM curriculum.

We are also promoting STEM educational improvements with neighbouring communities in the region where the Global Technology Centre will be located by engaging with science researchers and public schools, building on existing science museums and research and development facilities.

[1] A research and development (R&D) levy requires us to invest 1% of our gross production revenue from Brazilian fields that have an obligation to pay special participation, on R&D in Brazil. Investments like the GTC and the Science Without Borders programme will contribute to fulfilling the levy obligation.

[2] See footnote 1.

STEM projects being supported include:

- A partnership with the NGO Alfa e Beto Institute to develop a programme to create mentors in infant education. Its aim is to improve the quality of teaching for children up to the age of six. In 2013, teachers from public schools will be given training in various municipalities of Rio de Janeiro and Rio Grande do Sul states. The target is to form a large contingent of teachers who are properly qualified to interact with this age range and to provide guidance to new teachers.

- We are working in partnership with the NGO The Sangari Institute to support implementation of their Science and Technology with Creativity programme. The programme helps public schools to develop a new investigative approach to teaching science, which involves experiments in the classroom. It currently benefits around 2 000 students at grades 1 to 9 from three schools in Rio Grande and approximately 800 students at grades 1 to 5 from six schools in Angra dos Reis.

- Through the SuperAção Jovem programme in partnership with the Ayrton Senna Institute, we are encouraging secondary public school students from Rio de Janeiro state to nurture their entrepreneurial capabilities. The aim is to encourage these students to gain positive experience of problem solving at school, in the community and in the learning process itself, thereby helping to reduce truancy. The programme is training 132 teachers and is benefiting approximately 10 000 students from 28 schools.

- A professional training programme in Rio Grande do Sul aimed at the oil and gas industry is helping to meet the demand for qualified local labour. This was developed in partnership with SENAI – the National Service for Industrial Apprenticeship. More than 160 people have undergone training, and courses are being expanded to involve a total of approximately 390 participants, who will be trained during the first half of 2013. The initiative is founded on a partnership with the government and local private sector shipyards, reinforcing the commitment to employability.

Project Blue

In 2012, we and our partners launched Project Blue, a ground-breaking, oceanographic monitoring project that will study conditions in the Santos Basin offshore Brazil, where we are exploring for and producing oil and gas.

Launched at Rio+20 in June 2012, Project Blue will be the first project in Brazil to study the ocean at this depth in a systematic way and will give valuable new and public information about ocean currents, water temperature, and other features such as salinity, pH, water colour and organic matter.

Project Blue is a partnership between BG Brasil, Coppe (a post-graduate programme in engineering linked to The Federal University of Rio de Janeiro) and Prooceano (an oceanographic consulting company).The project is our biggest research investment in the country: an investment of $9.5 million over three years.[1]

Project Blue is expected significantly to extend the knowledge of the Santos Basin, providing information that can help protect this rich and largely unexplored marine environment. The project will use state-of-the-art technology (such as gliders, drifters and profilers) which will be based in water and will transmit data by satellite for analysis by Coppe.

The project will establish a valuable baseline of information to enable detailed environmental monitoring. It is the first time that the region's ocean currents and oceanographic parameters have been studied at this depth. The initiative will be integrated with other systems already existent in Europe and in the USA.

Data from the project will be collected over three years and will populate a database that will be open to universities and research centres to use. An important aspect of the project is that the data is being made freely and publicly available. Universities, research organisations, and companies will be able to use it and it is expected to play a role, for instance, in granting local environmental licences.

The output from Project Blue should also contribute to a safer working environment, minimising potential environmental impacts from oil and gas and other operations in the Santos Basin. In the event of an oil spill or other incident, the industry will have much more detailed information about the area and will be better able to avoid environmental damage. Better knowledge of the environment can also save lives in the event of accidents with helicopters and vessels.

The project will also bring business benefits, as data on water conditions will help us and the oil and gas industry to plan and build facilities that are designed to withstand, for example, varying currents. The project can bring similar benefits for other marine businesses, including fishi ng and coastguard and rescue operations.

Commenting on the partnership at Rio, Professor Luiz Landau from Coppe, said:

"We will determine the baseline conditions in the Santos Basin so in the future we will be able to determine the actual environmental impacts from operations in the region. This project will make a tremendous contribution to science. A wide range of studies can be developed from the resulting data."

[1] BG Group is required to invest 1% of its gross production revenue from Brazilian fields on R&D in Brazil. Project Blue will contribute to fulfilling the levy obligation.

QGC: SUSTAINABLE WORKING IN QUEENSLAND

MILESTONES IN 2012

Our largest-ever operated capital project, the Queensland Curtis LNG (QCLNG) project, involves exploring for and producing gas in the gas fields of the Surat Basin, constructing a major LNG plant on Curtis Island near Gladstone and building a 540-kilometre pipeline network to take gas from the gas fields to Gladstone. The project, which is central to the Group's growth plans, represents an expected investment of around $20 billion between 2011 and 2014. It is expected to create more than 5 000 full-time jobs on average during construction until 2014, and up to 1 000 during operation, and is expected to add about A$32 billion to the Queensland economy in its first 10 years.

During 2012, we passed a significant milestone on the route to first LNG in 2014 as the first pre-fabricated modules for the plant, assembled by Bechtel in Thailand, arrived in Gladstone.

2012 sustainability activity and developments
We will only be successful in Queensland if we achieve social and environmental objectives set in consultation with regulators and local communities, as well as our commercial goals.

This report focuses on safety and contractor management, water, and community relations as areas that are central to our success. We recognise that these issues are often inter-related: a robust approach to safety underlies protection of the environment, while we can only engage successfully with local communities if they have confidence in our approach – and our contractor partners' approach – to safety and the environment.

SAFETY AND CONTRACTOR MANAGEMENT

CONTEXT

Queensland's expanding coal seam gas (CSG) industry presents the state with a significant opportunity but also with an employment and skills challenge. This skills challenge has been recognised by the Queensland government[1], which has invested in training to meet the industry's future needs[2], and by industry bodies[3].

The construction of three major LNG projects in Queensland is seen as having a particularly significant impact on the local employment market. Together these projects are expected to generate more than A$45 billion ($46 billion) in capital expenditure and produce 28.8 million tonnes per annum (mtpa) of LNG.[4] As well, there is rapid expansion of exploration, production and gas distribution activity in the Surat Basin, in order to secure and transport gas reserves for domestic use and for export. Economic studies indicate that a mid-range 28 mtpa industry is expected to generate over 18 000 jobs in Queensland and increase gross state product by over A$3 billion ($3 billion).[5] Competition for labour and skills in the industry is strong and labour costs relatively high, leading some companies to import labour, or consider building plant overseas.[6] In this context, our priority remains to attract and retain appropriately skilled employees and to embed a strong safety culture, including long-term safety behaviours.

2012 personal safety performance
Safety performance in 2012 improved. By the end of 2012 the total recorded case frequency (TRCF) had reduced from 8.06 in 2011 to 6.39 (a reduction of 21%) and the severity of injuries arising was reduced. However, this still fell short of the internal target of 5.0.

2012: issues identified
In 2012, we continued to analyse reasons behind the high level of incidents and to implement specific measures to address them, focusing on three key areas: personal safety behaviour, systems and leadership, and working with contractors.

PERSONAL SAFETY BEHAVIOUR

During the year, rapid growth in our activities meant we had a growing recruitment need, in the context of a shortage of workers with industry experience.

A key challenge during 2012 (for us and our main contractors) was the large pool of new entrants to the Queensland oil and gas industry on whom we and our competitors are now drawing. During the year, our activity ramped up, with the total number of people working on the project reaching 9 000. We recognised that a large percentage of this workforce were unfamiliar with the high safety standards and expectations of the oil and gas industry. This lack of familiarity with our expectations put more intense demand on our systems for inducting, bringing on board and supervising people.

In response to this, we and our contractor partners recognised and addressed the need for a stronger safety culture and leadership at the worksite. We also identified a need to better train, monitor and supervise new personnel and to ensure our standards and expectations are understood and embedded, particularly in the early stages when workers are still relatively inexperienced.

1 In his address at the 2011 APIA Convention, Federal Minister for Resources and Energy Martin Ferguson said that on the east coast of Australia, Queensland's CSG industry could generate as many as 18 000 jobs. "While job creation is good for the nation, it is also creating sectoral pressures in terms of wages and labour given our very low level of unemployment," he said.

2 The Queensland government has established a funding programme to support training for the CSG/LNG industry in Queensland. The government intends committing up to $5 million over two years on the understanding that industry will support the investment in training on a dollar-for-dollar basis (that is, government will provide a subsidy of 50% of the cost of specified training). The programme will be directed towards developing the specific skills, identified in the Workforce & Competency Development Strategy Plan for the Queensland Coal Seam Gas/Liquefied Natural Gas Industry, as being needed for the operation of the CSG/LNG process.

3 Skills Queensland, the industry-led statutory body that focuses on meeting skills needs, identifies the challenge in its report, Work for Queensland: Resources, Skills and Employment Plan. See also: Workforce Planning for the Queensland CSG/LNG industry (http://www.business.qld.gov.au/industry/csg-lng-industry/csg-lng-skills-workforce-development
Energy Skills Queensland presentation http://www.energyskillsqld.com.au/wp-content/uploads/2011/12/csglng-workforce-planning-presentation.pdf

4 http://www.industry.qld.gov.au/lng/projects-queensland.html

5 http://www.industry.qld.gov.au/lng/projects-queensland.html

6 http://www.theaustralian.com.au/business/mining-energy/lng-industry-faces-skills-crunch-says-total-chief/story-e6frg9df-1226390494208

In 2012, we took the following actions:

- We introduced behaviour-based safety programmes encouraging workers to look out for each other to prevent injuries.
- We launched the Sure Foot programme – which used walking as a means to build safety awareness. It was designed by one of our employees to respond to people twisting ankles and tripping on sites and focused on teaching people how to walk safely on uneven surfaces. It has been successful in turning round performance and has been adopted by other coal seam gas companies in the area. The employee who developed and implemented the programme was awarded a Gold Hard Hat Award as part of our employee safety recognition programme.
- We reviewed our induction programmes to improve alignment with Group expectations, with a focus on highrisk activities and driving risk.
- We strengthened the leadership and on-site supervision skills and engagement of our main contractor.
- We enhanced analysis and follow-up on driving monitoring data to recognise outstanding behaviours but also apply accountability more consistently for unsafe driving.
- We conducted a full business stand down to listen to our workforce.

STRENGTHENING SYSTEMS AND LEADERSHIP

A second challenge for us during the year was the scale and diversity of our work in Queensland, where we are constructing upstream facilities, an LNG plant and a major pipeline as well as our fast-expanding drilling operations in onshore gas fields. The rapid growth in each of these diverse and geographically widespread operations highlighted the need for a unified safety management framework combined with strengthened safety leadership at all levels to embed a consistent safety approach.

In 2012, we took the following actions:

- We developed and began to implement a unified safety management system across all our Queensland operations to encompass minimum standards and procedures.
- With our contractor programmes, we identified that we needed to build the safety leadership of front-line supervisors and started to develop programmes to address this.
- We re-launched our Health, Safety, Security and Environment (HSSE) Committee. This Committee is the key HSSE leadership and decision-making body and is chaired by the Operations Director.
- We started reviewing the effectiveness of critical controls and raised awareness of significant risk areas, such as major accident hazards (MAHs) and Life Savers, including our Driving Life Saver.

WORKING WITH CONTRACTORS

The third and related challenge that we recognised was the complexity of consistently selecting and managing a wide range of contractor companies across our diverse operations to achieve high standards of safety. This requires investing time in building relationships, aligning values and collaborating to achieve the strong safety culture and behaviours we expect.

In 2012, we took the following actions:

- We developed a QGC contract management standard for how we select and manage contractors, in line with the improved BG Group Standard.
- We held a one-day safety workshop for us and our contractors, across all our operations, involving the BG Group Chief Operating Officer. The purpose was to build engagement and commitment.
- We identified and trained 'demand managers'– managers with specific responsibility for contractor safety performance.
- We intervened with contractors who did not meet our safety expectations, including changing site management.
- We established programmes to encourage active intervention at the worksite.

Looking ahead

We believe these are the right approaches to address the complex and inter-related issues underlying our safety performance but recognise it will take time before changes of this kind result in operational improvement. We are committed to achieving our goal of zero injuries and will continue to work to address the challenges we face and improve our safety performance.

In 2013, we will be delivering further improvement in a number of areas through:

- implementing changes in the HSSE organisation, building consistency and alignment across our operations and putting more people on the ground, at the point of risk
- upgrading our induction scheme to achieve greater consistency across our operations
- completing the identification, appointment and training of site safety managers
- delivering front-line supervision training across the organisation
- arranging additional workshops with our key contractors
- further full business stand-downs to listen to our workforce
- issuing safety cases for MAH facilities.

For more information on our safety approach in Queensland, please visit QGC's website:

Pipeline safety: http://www.qgc.com.au/working-safely/pipeline-safety.aspx

LNG plant safety: http://www.qgc.com.au/working-safely/lng-plant-safety.aspx

Shipping safety: http://www.qgc.com.au/working-safely/shipping-safety.aspx

WATER

CONTEXT

Water is a vitally important resource in Queensland, where agriculture is a major contributor to the economy. Periodic drought and flooding have made water supplies unpredictable. Ensuring we manage our impact on water is critical to ensuring co-existence with rural communities in Queensland.

In our Surat Basin coal seams, the natural gas is held in place by the pressure of groundwater (water located beneath the earth's surface). To produce the gas, the groundwater is pumped to the surface, relieving this pressure and allowing gas to flow and be collected. In our Queensland operations, water produced from the gas fields is saline and generally not suitable for domestic use without treatment.

Water production from our fields in Queensland is expected to peak at between 150 and 190 megalitres (ML) a day in 2014, with average production over the next 20 years of around 50 ML per day. For comparison, the total water extraction from the Great Artesian Basin is estimated to be in excess of 50 ML per day.

We are committed to monitoring groundwater quality and water levels where we operate, and to making good any impact our operations may have on existing water users. During 2012, we made progress with our plans for monitoring, managing and making good any impacts.

State and federal legislation
Our Queensland operations have drawn up a range of detailed plans for managing water that comply with more than 200 state and federal government water-related approvals.

On 21 December 2012, we received approval from the federal government for our key water monitoring and management plan (the Stage 2 CSG Water Monitoring and Management Plan). This made QGC the first CSG company to be granted such approval. This plan provides a complete overview of QGC's planned water infrastructure, surface water and groundwater monitoring programmes and data gathering, analysis and interpretation.

We are committed to monitoring and mitigating any impact we have on local water quality and supplies and will invest more than A$1 billion ($1 billion) by 2014 on water-related treatment facilities, research, modelling, monitoring and management.

2012 ACTIVITIES AND OUTCOMES

Water monitoring
We are setting up a comprehensive groundwater monitoring network to measure and record groundwater pressure and quality and help us to understand and manage any impact associated with our activities.
This network, which complies with state regulatory requirements, currently involves a A$79 million ($82 million) programme to install and monitor 45 groundwater monitoring bores between 2011 and 2013.

Drilling of dedicated groundwater monitoring wells and installation of monitoring instrumentation is already underway and in 2012, we continued work on constructing this network which will ultimately span the entire area of our Surat Basin activities. It is scheduled to be in place before we start our main extraction of water from the coal seams in late 2013.

We have thoroughly modelled the impact our operations could have on aquifers and we are working with the Commonwealth Scientific and Industrial Research Organisation (CSIRO), Australia's national science agency, to produce regional models. Our modelling results, which have been independently confirmed, show minimal impact to aquifers above and below the coal seams. The monitoring network we are installing provides baseline information on the groundwater systems and allows early identification of changes in those. We are feeding data from the groundwater monitoring wells into the models we have generated to ensure the models use the most up-to-date and accurate data possible.

Water treatment
Our water management strategy in Queensland is to treat the water we produce and make it available for use by local landholders, industry and communities.

By 2014, we will have invested more than A$1 billion ($1 billion) in new water treatment plants and associated water infrastructure. In particular, we are investing in two large state-of- the-art water treatment plants which use reverse osmosis to treat the water produced from coal seams.

These two large water treatment plants will have a combined capacity to treat about 200 ML a day – or about 200 Olympic-sized swimming pools – during peak production. These facilities, in addition to one smaller water treatment plant, are located across our project's three major gas production areas.

The reverse osmosis treatment process will convert almost 97% of produced water into treated water which can be used. The remaining 3% makes up the brine stream which will be managed separately.

QGC has already commissioned two smaller water treatment plants. The Windibri plant provides treated water for industrial use and the Kenya Re-locatable plant provides treated water to irrigators. The two larger plants are due to become operational by mid-2013 and 2014 respectively.

This treated water will provide a significant benefit during the life of the project as farmers will have access to a more reliable supply of water while we are operating in the area.

Salt treatment
The reverse osmosis water treatment process results in the production of brine. This is further processed to limit the volume to about 3% of the water produced in our operations. This concentrated brine will be temporarily stored in dedicated ponds close to the two water treatment plants on our land.

Our Queensland operations will generate about 4 million tonnes of salt from this brine by 2040. We are currently working in collaboration with Australia Pacific LNG and Arrow Energy to assess the technical and commercial feasibility of processing the brine to separate its main components, so they can be used commercially. The results from technical trials in Australia, France, Germany and the USA are expected in 2013.

If this process is not commercially feasible, the brine will be crystallised and stored in a dedicated facility, as set out in our project environmental impact statement.

Aquifer injection
During 2012, we also advanced plans to trial aquifer injection of treated coal seam water into targeted underground aquifers; these trials are required by the federal government. Aquifer injection means putting treated water into suitable aquifers and work has started on establishing groundwater properties with the injection trial scheduled for 2013 and a trial with treated CSG water scheduled for 2014.

STAKEHOLDER ENGAGEMENT

Relationships with stakeholders and particularly local landowners and communities are critical to the success of our work in Queensland. Completion of the QCLNG project requires more than 2,000 land use agreements with landholders and indigenous land use agreements with traditional custodians.

We are committed to working with landowners and, in line with regulation, have a commitment to make good any impact our operations have on existing water users. A next step will be to enter make good agreements[1] with landholders identified in the Queensland Water Commission's Underground Water Impact Report for the Surat Cumulative Management Area.

We have already identified the users we will or might impact and have begun to work to develop these agreements with them. Agreements are agreed on a case-by-case basis with landholders: make good measures are outlined in the Water Act 2000 and can include deepening existing water bores, drilling new water bores or constructing alternative surface water supplies.

During 2012, we continued to foster relationships with landowners and the wider public on water management. Increased investment in explaining our approach to water management has made it possible to build wider acceptance that we are operating responsibly. CSG continues to have detractors, but local communities appear more widely accepting of the industry in Queensland, while still having concerns about the potential impact of CSG extraction on their own water supply.

We continued to invest in communications in 2012, providing updates on the progress of our water management activities at community committee meetings and also through one-on-one meetings with landholders. A new A$1 million ($1 million) community centre was opened in Chinchilla, the heart of our Queensland upstream gas operations. The centre, staffed with people who live and work in the community, is providing information and allowing local people to ask questions and raise issues directly with the Group.

WORKING WITH COMMUNITIES

CONTEXT

Coal seam gas is a major new industry for Queensland. Its success depends on working with local communities and integrating into the local economy in the short and long term. This means understanding and responding to local concerns.

Communities near our exploration and production operations in the Western Downs, along the gas pipeline route, and in Gladstone where the LNG plant is being constructed, have distinct characteristics and interests.

- **Gladstone:** the port city where our QCLNG plant is being constructed on Curtis Island has an industrial heritage and the gas industry is widely accepted. Concerns are focused on the potential drain of development on the town's resources – particularly housing supply or labour and skills – and on the much-used Gladstone harbour from the potential impact of dredging associated with port development.
- **Western Downs:** in the largely agricultural community where we explore for and produce gas, the primary issues for landowners are water protection and land access. They are concerned that CSG does not disrupt their business and way of life. For residents in the towns, the main concern is the impact of the industry on housing supply and affordability. Landowners in the areas where the pipeline is being constructed are concerned about the timing of pipeline construction and the management of potential restrictions on their ability to run their businesses.

2012 ACTIVITIES AND OUTCOMES

Engagement
During 2012, we extended engagement and communication with all our Queensland communities. An important change in the Western Downs was the introduction of regional engagement co-ordinators based in three information centres across the region instead of a single centre in Chinchilla. This change, including the opening of an office in Wandoan, the most northerly town in the area, has enabled us to be much more active across the whole Western Downs region.

Engagement through information centres, community events and dedicated communication with landowners and other community members has generated greater acceptance of the industry's willingness to discuss and work alongside landowners.

[1] Make good agreements or arrangements are agreements between a CSG company and a landholder to address any impact of water extraction by a CSG operation on an existing water bore. Under Queensland legislation, if water extraction by a CSG operation is affecting an existing water bore, then the responsible CSG company must restore the bore's capacity to supply water, or provide the owner with an alternative water supply. The bore owner and CSG company may also agree to a monetary settlement. See: http://www.ehp.qld.gov.au/factsheets/pdf/water/w194.pdf

A particular focus of engagement has been our water management plans. We have sought to show how investment in water treatment can provide a supply of local water while gas is being produced, while the commitment to make good any impact, and the monitoring of and reporting on water supply and quality provide additional reassurance.

We continue to seek to demonstrate that the gas industry can coexist with other landholders. This means minimising impact on properties, modifying plans in line with development plans, minimising interruptions to work and providing opportunities for landholders to continue to earn income from the gas industry. Our goal is to continue to be seen as a positive contributor to the rural environment and to provide an overall benefit to the community. This can be achieved by a continued effort to listen and respond to local concerns.

In Gladstone, we have seen good progress in building relationships in the town through local partnerships as well as more informal engagement and communication.

A key area of engagement here has been safety, where the message has gone beyond our workforce into the community. Community safety events including an event on safe driving saw high attendance from employees and their families and helped reinforce the message to workers to stay safe. The positive impact we can have by bringing external expertise on safety into the community is winning recognition and having a noticeable impact on local culture.

We have also been able to empower local organisations and people to find solutions. The process or supply companies that bid for work with us can build their skills and capacity and reinvest that experience in other ways, for instance in a family business.

We also continued to engage landowners along the pipeline being constructed from the gas fields to Gladstone, informing them of plans and how long work will take, and working with them to minimise disruption.

Over time, we are becoming more embedded in our Queensland communities as people more generally accept the gas industry's benefits and recognise that the industry and the local community can work to solve problems together.

SOCIAL INVESTMENT

The framework within which we invest in communities where we work is the Social Impact Management Plan (SIMP). This plan, approved by the Queensland Department of Infrastructure and Planning in April 2012, commits up to A$150 million to communities from the Surat Basin to Gladstone by 2014.

The SIMP addresses potential impacts from our work in Queensland. It details about 94 commitments across six themes: indigenous participation; housing; community health, safety and social infrastructure; land use management; employment and economic development; and road and marine traffic management.

We report to the regulator on progress against this plan. In 2012, we published a report QGC Sustainable Communities Program which sets out our social investment achievements and outcomes in detail.

Investment progressed well during 2012 as we worked with hundreds of local partners across the region and invested more than $17.3 million in community projects in total.

Key achievements during 2012 included:

- developing an integrated housing strategy for Gladstone and the Western Downs, investing in affordable housing in the region and contributing more than A$6 million to local housing schemes and trusts
- strengthening local workforces by supporting apprentices and trainees in non-CSG skills to address the draw of local labour to the gas industry
- more than 100 apprentices and trainees are enrolled in the programme
- support for community projects aimed at enhancing liveability and community cohesion in the communities in which we operate through the QGC Sustainable Communities Fund. The fund is investing up to A$6 million by 2014 and has already supported 110 community projects, spending A$3.4 million ($3.5 million) during the period since its launch in February 2011
- investing in a dialysis unit for Gladstone hospital, contribution to a new aero-medical evacuation service for Western Downs and supporting a range of other health initiatives
- building local business capacity and supporting local businesses and creating pathways for school students into the gas industry
- investing in initiatives to maintain Gladstone harbour as a local amenity, including buying a rescue boat and working with Info Fish Australia to promote sustainable recreational fishing
- developing a strategy to create long-term opportunities for indigenous people and building capacity for indigenous businesses to participate in our supply chain.

REPORTING AND MONITORING

During the year, we reported regularly to our regional community consultative committees. These committees were set up to provide regular representation of community views to QGC and a forum for information exchange between the company and community representatives. Each committee represents a cross-section of the community. We also partnered with the University of Queensland's Centre for Social Responsibility in Mining to achieve best practice in meeting our social responsibilities. With the centre, and our regional committees, we developed sustainability indicators to measure our direct impact and contribution to the communities where we operate.

Investing in local businesses is central to our approach in Queensland. A six-monthly report to the Queensland Coordinator-General on Australian industry participation, published in November 2012, showed that since the start of 2010 we had invested more than A$11 billion ($11 billion), with about 76% of this going to Australian companies and about 61% of that to Queensland companies. More than 90 000 Australian businesses have registered an interest in providing goods and services to our Queensland operations.

PERFORMANCE DATA

PERFORMANCE TABLES

People

	2012	2011	2010	2009	2008
Employees worldwide (average for year)	**6 569**	6 472	6 171	6 079	5 395
– of which employed outside of UK (average for year)	**4 703**	4 496	4 211	4 163	3 639
Employees working away from home country	**775**	679	646	623	623
Employee turnover [a]	**13.8**	11%	11%	7%	9%
Women in workforce [a]	**28%**	29%	28%	28%	25%
Percentage of women on senior management [a]	**12%**	10%	10%	10%	10%
Percentage of non UK/US nationals on senior managment team [a]	**24%**	23%	21%	19%	16%
Speak Up/whistleblowing cases	**120**	134	151	125	70
Number of reported cases with actions against individuals following Speak Up investigations [b]	**18**	28	24	15	n/a

[a] Data not available for Comgás and Gujarat Gas businesses, representing approximately 25% of employees.

[b] In 2010, the reporting methodology for actions as a result of Speak Up investigations was changed. 2009 reported cases only included cases where disciplinary action was taken. 2010 and 2011 data includes reported cases where actions ranged from training requirements to disciplinary action.

Safety, Health & Security

	2012	2011	2010	2009	2008
Fatalities – employees	**0**	0	0	0	0
Fatalities – contractors	**2**	3	2	2	3
Total recordable case frequency – employees (per million work hours)	**0.53**	0.67	0.63	0.84	0.88 [a]
Total recordable case frequency – contractors (per million work hours)	**2.73**	2.35	1.04	1.83	1.98 [a]
Total recordable case frequency – total workforce (per million work hours)	**2.26**	1.92	0.94	1.59	1.74
Reported occupational-related illness frequency	**0.21**	0.49	0.56	0.22	0.14

[a] Employee/contractor split not reported in prior years, and therefore not subject to assurance.

Social performance

SOCIAL INVESTMENT ($000)

	2012	2011	2010	2009	2008
Charitable donations/philanthropy	**1 142**	3 436	1 211	1 670	3 239
Local community investment	**12 927**	4 949	3 613	2 365	3 088
Regional development	**5 606**	2 617	1 030	828	632
Miscellaneous	**5 757**	481	474	712	1 211
Total voluntary [a]	**25 432**	11 484	6 328	5 575	8 170
Total mandatory [b]	**1 800**	1 819	2 006	3 113	1 115
Total social investment	**27 232**	13 303 [c]	8 334	8 668	9 285

[a] These figures include reported social investments in Tanzania and Thailand. While these operations are not wholly owned by BG Group, the social investments were 100% BG Group investments and so reported on this basis.

[b] In previous reports, we reported 'contractual obligations through production-sharing agreements.' This included mandatory social payments to governments, over which the company had no meaningful control. This year, we have narrowed the reporting criteria to 'mandatory social investment.' Whilst is mandatory, the group has full control over how such funds are spent.

[c] Spend under Kazakhstan contractual obligations (Kazakhstan Social Fund) was included in 2011 but has been excluded in 2012 due to the redefinition of this indicator (see footnote b above). On the 2011 basis, the 2012 figure would have been $15.3 million.

Environment

NON-GHG EMISSIONS ('000 TONNES)

	Venting	Fugitive [b]	Flaring	Fuel Use	Electricity generation	Distribution losses
Carbon monoxide	–	–	2	14	0	–
Nitrogen oxides	–	–	1	29	2	–
Sulphur dioxide	–	–	11	13	0	–
Volatile organic compounds	5	2	1	2	0	1

NON-GHG EMISSIONS ('000 TONNES)

	Total 2012	Total 2011	Total 2010	Total 2009	Total 2008	t/mmboe 2012	t/mmboe 2011	t/mmboe 2010	t/mmboe 2009	t/mmboe 2008
Carbon monoxide	**16**	14	12	10	9	**38**	33	28	22	21
Nitrogen oxides	**32**	29	21	19	17	**76**	68	48	43	40
Sulphur dioxide	**24**	21	23	29	31	**57**	50	52	66	72
Volatile organic compounds	**11**	12	12	11	11	**25**	27	27	25	24

ENERGY USE (GWHrs)

	Gas	Electricity	Oil	Total 2012	Total 2011	Total 2010	Total 2009	Total 2008
Energy use	25,443	34	3,948	**29,425**	28,556	31,014	36,505	36,001

WASTE DISPOSED ('000 TONNES)

	Waste by Disposal Route										
	Authorised landfill	Incineration	In situ disposal	Treatment/ discharge	Reuse/ Recycling	2012 On-site storage	Total 2012 [c]	Total 2011 [c]	Total 2010	Total 2009	Total 2008
Cuttings	6		1				**7**	10	7	16	40
Metal	0				1	0	**1**	1	2	1	2
General	36	1	0	0	3	115	**40**	13	7	11	16
Hazardous	5	1	24	0	35	1	**65**	15	24	19	8
Total	47	2	25	0	39	116	**113**	39	40	47	66

WATER DISPOSAL ('000 TONNES) [d]

			Groundwater/ reinjection						Reused/recycled by third party	
	Coastal water	Open Marine	to freshwater aquifer	to non-freshwater aquifer	Inland sewerage system	Inland surface water	Soil water/ irrigation	Evaporation	Freshwater	Non-freshwater
Produced water	–	5,473	–	243	91	8	6	1,100	–	–
Oil in produced water	–	0	–	0	0	0	–	–	–	–
Process water	2	11	–	58	156	–	3	–	–	–
Oil in process water	–	–	–	–	0	–	–	–	–	–
Other waste oily water	–	6	–	8	–	0	–	–	–	–
Oil in other waste oily water	–	0	–	0	–	0	–	–	–	–
Associated water	–	–	–	–	–	39	–	3,724		795
Total oil	–	0	–	0	0	0	–	–	–	–
Total water	2	5,490	–	309	247	47	9	4,824	–	795

WATER DISPOSAL ('000 TONNES) [d]

	Total 2012	Total 2011 [e]	Total 2010	Total 2009	Total 2008
Produced water	**6921**	6090	–	–	–
Oil in produced water	**0**	0	–	–	–
Process water [f]	**230**	287	9386	7335	3945
Oil in process water	**0**	0	0	0	0
Other waste oily water	**14**	8	–	–	–
Oil in other waste oily water	**0**	0	–	–	–
Associated water	**4558**	3272	–	–	–
Total oil	**0**	0	0	0	0
Total water	**11723**	9657	9386	7335	3945

Climate change

GREENHOUSE GAS EMISSIONS ('000 tonnes CO_2e) FROM ASSETS UNDER BG GROUP CONTROL

	Total 2012	Total 2011 [a]	Total 2010 [a]	Total 2009	Total 2008
Scope 1	**7,740**	7,507	8,716	9,897	9,673
Scope 2	**20**	19	24	30	
Total gross controlled emissions	**7,760**	7,526	8,740	9,927	

GREENHOUSE GAS EMISSIONS INTENSITY (SCOPE 1 & 2) ('000 tonnes CO_2e/mmboe)

	Total 2012	Total 2011	Total 2010	Total 2009
E&P	**14**	13	13	12
Global Shipping	**27**	26	22	27
T&D	**3**	3	10	10
Power	**700**	671	724	700

SCOPE 1

Greenhouse gas emissions ('000 tonnes CO_2e)

By source	**2012**	2011	2010	2009	2008
Venting	**595**	676	643	634	599
Fugitive	**45** [a]	19	6	5	8
Flaring	**620**	559	795	706	705
Fuel use	**5,276**	4,623	3,902	4,101	3,658
Electricity generation	**1,114**	1,526	2,614	3,683	3,944
Distribution losses	**90**	104	756	768	759
Total GHG	**7,740**	7,507	8,716	9,897	9,673

By GHG (in '000 tonnes of carbon dioxide equivalent)	**2012**	2011	2010	2009	2008
Carbon dioxide	**7,306**	7,064	7,665	8,836	8,644
Methane	**368**	381	985	981	948
Nitrous oxide	**66**	62	66	80	81
Total GHG	**7,740**	7,507	8,716	9,897	9,673

By business segment	**2012**	2011	2010	2009	2008
E&P	**4,250**	3,852	3,723	3,417	3,202
Global Shipping	**2,271**	2,007	1,605	2,015	1,739
T&D	**102**	118	770	778	771
Power	**1,114**	1,526	2,614	3,684	3,944
Other	**3**	4	4	3	17
Total GHG	**7,740**	7,507	8,716	9,897	9,673

Greenhouse gas emissions intensity ('000 tonnes CO_2e/mmboe)	**2012**	2011	2010	2009	2008
E&P	**14**	13	13	12	12
Global Shipping	**27**	26	22	27	28
T&D	**3**	3	10	10	9
Power	**699**	671	723	697	690
Total	**18**	18	20	22	22

SCOPE 2

Greenhouse gas emissions ('000 tonnes CO_2e)

By source (CO_2e)	**2012**	2011 [a]	2010 [a]	2009
Purchased electricity	**20**	19	24	30
By business segment				
E&P	**12**	11	9	8
Global Shipping	**–**	–	–	–
T&D	**3**	4	5	5
Power	**1**	0	5	13
Other	**4**	4	5	4
Greenhouse gas emissions intensity ('tonnes CO_2e/mmboe)				
E&P	**38**	35	34	27
Global Shipping	**–**	–	–	–
T&D	**125**	92	61	63
Power	**334**	201	1460	2416

EQUITY SHARE GHG EMISSIONS

	2012	2011	2010	2009	2008
GHG emissions ('000 tonnes)	**9,608**	10,611	12,232	13,862	13,839
Equity share ('000 tonnes GHG/mmboe)	**26**	28	33	37	37

WATER WITHDRAWAL ('000 TONNES) [g]

	Desalinated associated water	**Desalinated ground water**	**Ground water**	**Desalinated seawater**	**Seawater**	**Municipal water supplies**	**Rain water**	**Reused/ recycled**	**Surface water**	**Waste water (third party)**
Freshwater use	–	2	249	47	–	491	1	55	979	–
Non-freshwater use	–	–	–	20	36	–	–	18		–
Total	–	2	249	67	36	491	1	73	979	–

	2012 [g]	**2011** [g]	**2010**	**2009**
Freshwater use	**1824**	1904	1857	2190
Non-freshwater use	**74**	107	–	–
Total	**1898**	2,011	1,857	2,190

CONTROLLED DISCHARGES ('000 TONNES)

	2012	2011	2010	2009	2008
Drill cuttings	**13**	10	15	29	45
Oil in cuttings	**0**	0	0	1	2
Muds	**14**	13	15	25	62
Total	**27**	23	30	55	109

SPILLS TO THE ENVIRONMENT

	2012	2011	2010	2009	2008
Number of hydrocarbon spills to land	**192**	140	37	14	14
Number of hydrocarbon spills to sea	**17**	24	17	43	17
Number of hydrocarbon Spills	**209**	164	54	57	31
Number of hydrocarbon spills to land (of one barrel or more)	**11**	12	5	1	7
Number of hydrocarbon spills to sea (of one barrel or more)	**0**	6	6	9	3
Number of hydrocarbon spills (of one barrel or more)	**11**	18	11	10	10
Total volume of hydrocarbon spills to land	**60**	203	42	9	58
Total volume of hydrocarbon Spills to sea	**1**	82	617	170	6
Total volume (bbls) of hydrocarbon spills	**61**	285	659	179	64
Number of produced water spills to land	**25**	36	40	38	–
Number of produced water spills to land (of one barrel or more)	**16**	25	25	6	–
Total volume of water spills to land (m3)	**170**	1030	774		–

[a] CO2 emission factors for electricity purchased updated (2010/2011 data) using latest IEA factors.
[b] Fugitive Emissions reported from Marcellus (USA) in 2012. This data was not available for reporting in 2011.
[c] Waste data does not include TGGT (JOJV-acquired 2011).
[d] Water disposal data not currently captured from Charter Shipping operations.
[e] 2011 Water disposal figures from Australia operations corrected.
[f] Produced & Process water was reported as 'process water' prior to 2011.
[g] Water withdrawal does not include TGGT.

TARGETS

Environment

OUR TARGETS IN 2012	ACTIONS TAKEN IN 2012	OUR TARGETS IN 2013
Develop and roll out Group Water Management Standard and Water Risk Management Guideline, for use in BG Group operations and projects, as appropriate to the level of risk from water-related issues.	**Ongoing** Water Management Standard and Guideline have been developed and are to be rolled out in 2013.	All businesses with water risks to develop Water Management Plans.
Develop 2013-17 Group environment strategy.	**Completed** New strategy developed with emphasis on energy efficiency and water management.	
Achieve one million tonnes GHG reduction target.	**Completed** New five-year emissions intensity (GHG per unit production) target developed – a 10% reduction in equity share emissions intensity for our combined upstream and LNG operations.	All businesses to develop enhanced Energy Management Plans detailing how reduction projects and behavioural change will deliver the new GHG target. Keep emissions intensity constant with 2012 levels.
	New	Reduce Group-wide operated sulphur dioxide (SO_2) emissions by 35% from 2012 levels by 2015 through process improvements in Tunisia.

Ethical conduct

OUR TARGETS IN 2012	ACTIONS TAKEN IN 2012	OUR TARGETS IN 2013
Refresh and re-launch the BG Group Principles into Practice booklet.	**Completed**	
Roll out the Advanced Anti-Bribery and Corruption e-learning to high-risk groups.	**Completed**	
Use the 'Adequate Procedures' toolkit (to test the effectiveness of procedures to prevent bribery) in the business.	**Completed**	Continue to have asset visits by the Ethical Conduct Compliance Unit to monitor compliance.
	New	Ensure all key operations have refreshed their risk assessments and, as necessary, developed action plans identifying initiatives to improve their management of ethical conduct risk.

People

OUR TARGETS IN 2012	ACTIONS TAKEN IN 2012	OUR TARGETS IN 2013
Finalise the succession and development plans for key leadership positions, in preparation for a new Chief Executive.	**Ongoing** Succession plans are now in place for approximately 70 senior roles in the business and for critical functional roles. Critical gaps have been identified and an external market mapping exercise is underway.	Establish and improve the succession planning process and philosophy.
Articulate and develop our Employee Value Proposition	**Ongoing** Work done to test global consistency of employee experience, including a common tone, style and look and feel, during recruitment and first 90 days. This work will continue throughout 2013.	Work on our key differentiation factors (relative to competitors for talent). Develop a way of bringing our values and beliefs to life to deepen employee pride and sense of belonging.
Complete reviews of global resourcing needs, talent management, graduate development and the leadership model.	**Completed** New planning systems introduced to provide a clearer long-term view of future resourcing needs. Consistent and objective talent reviews and succession planning framework and process introduced. Four key talent pools and four development centres set up. Emerging leader programme completed, external leadership programmes run. Internal coaching programme set up.	Introduce new resourcing systems. Increase the level of leadership capability. Review, refine and implement key performance indicators for Resourcing Talent Management, Development and Leadership. Introduce capability framework across business to identify current and future capability strengths and gaps.
	New	Develop a detailed diversity strategy with accompanying targets and implementation plan.

Safety, Health & Security

OUR TARGETS IN 2012	ACTIONS TAKEN IN 2012	OUR TARGETS IN 2013
Total Recordable Case Frequency (TRCF) per million work hours of 1.35.	**Target not met** TRCF of 2.26 achieved.	TRCF per million work hours of 1.75.
90% of all high-risk contractors' safety performance to be tracked through the PerforMIS system.	**Target not met** 76% achieved.	Key performance indicator amended in 2013 to percentage of key contracts actively managed, with higher standards than tracking of performance but also requiring active planning and management of HSSE contract risks. Target in 2013 is 95%.

Social performance

OUR TARGETS IN 2012	ACTIONS TAKEN IN 2012	OUR TARGETS IN 2013
Initiate work stream to investigate how to report on BG Group's wider socio-economic contributions.	**Completed** Commissioned an external expert to inform our approach to reporting socio-economic contribution.	
Conduct IBLF accredited partnership training in a minimum of four operations.	**Ongoing** IBLF training conducted for PCA managers at corporate level.	Continue an active work programme on partnerships with IBLF and other organisations to support a broader strategy on external engagement.
Establish five new social investment projects across the Group, consistent with Group-wide themes of education, skills development and livelihoods enhancement.	**Completed** Vocational Education and Training (VET) partnerships: • Tanzania: Voluntary Services Organisation (VSO) & VETA • Brazil: Senai in Angra • Brazil: in coastal areas of Rio de Janeiro • Egypt: ACDI & VOCA STEM education partnerships: • Brazil: Geo-Sciences Museum at the Federal University of Rio de Janeiro • Brazil: in Rio Grande du Sal • UK: Science Museum • UK: Aberdeen City Councils	Continue to expand our social investment partnerships in the areas of STEM ducation, vocational education and training, and livelihood enhancement.
Develop guidelines on grievance mechanisms in line with the UN Guiding Principles on Business and Human Rights, and update grievance mechanisms accordingly in at least two operations.	**Completed** Grievance mechanisms guidelines developed. Updated grievance mechanism in QGC. Grievance mechanism in development in our business in Tanzania.	Conduct a human rights impact assessment.
Increase year-on-year social investment spend in the majority of BG Group-operated businesses.	**Completed** Increased social investment spend in the majority of businesses.	Continue to increase our Group-wide social investment spend in line with an increased spend target by 2014.

INDEPENDENT ASSURANCE STATEMENT

Our scope
BG Group commissioned DNV Two Tomorrows Limited (Two Tomorrows) to undertake independent assurance of its Sustainability Report 2012 as published at www.bg-group.com for the following areas:

- sustainability performance data for the year ended 31 December 2012, as published in the Performance Data section; and
- BG Group's self-declared Global Reporting Initiative (GRI) application level of A+ of the GRI "G3.1" Guidelines as published in the GRI index section.

Our approach
We performed our work using Two Tomorrows' assurance methodology which is based on our professional experience and international assurance standards, including the International Standard on Assurance Engagements 3000 (Revised) – 'Assurance Engagements Other Than Audits and Reviews of Historical Financial Information'.

We planned and performed our work to obtain the evidence we considered necessary to provide a basis for our assurance conclusions. We are providing a 'limited level' of assurance. A 'reasonable level' of assurance would have required additional work at Group and site level to gain further evidence to support the basis of our assurance conclusions.

We used the BG Group's Data Methodology Appendix which sets out how the sustainability performance data are measured, recorded and reported, as the basis of the Reporting Criteria for undertaking our assurance work. We also used the GRI Quality of Information Principles to evaluate the performance data.

Basis of our opinion
A multi-disciplinary team of sustainability and assurance specialists performed work at Group and asset level. Our assurance work included the following:

- interviewing senior management responsible for the management of sustainability, the Sustainability Report 2012 and data reporting systems;
- visiting a sample of two BG Group assets (QGC, Australia and BG Trinidad & Tobago) to review the systems and processes used at the asset head office level to collect and report the sustainability performance data to Group level;
- reviewing and sample checking the sustainability performance data measurement, collection and reporting processes at Group level;
- reviewing how the sustainability performance data was represented in the Performance Data section and within the relevant Performance sections of the report;
- assessing the GRI index for compliance with the GRI application level requirements for A+.

Responsibilities of the directors of BG Group and of the assurance providers
The Directors of BG Group have sole responsibility for the preparation of the Sustainability Report 2012. In performing our assurance work, our responsibility is to the management of BG Group, however our statement represents our independent opinion and is intended to inform all of BG Group's stakeholders including its management. We were not involved in the preparation of any part of the Report. However, having reviewed and provided feedback on drafts of the Report (including the Data Methodology Appendix), in a number of instances changes were made to the final version.

We provided two additional services to BG Group in 2012: an independent report review exercise which included, report benchmark, stakeholder interviews, media review and materiality review (using BG Group's methodology); and an independent review of BG Group's implementation of the Voluntary Principles on Security and Human Rights. We have not been involved in the implementation of any of the recommendations made during the course of these reviews.

Our core team comprised Jon Woodhead, Kate Martin, Richard Dalley, Gareth Manning and Samantha Parsons. Further information, including individual competencies relating to the team can be found at: www.twotomorrows.com

Our conclusions
On the basis of the work undertaken, nothing came to our attention to suggest that:

- the sustainability performance data for the year ended 31 December 2012, as published in the Performance data section, are not prepared in all material respects with the Reporting Criteria; and
- BG Group's self-declared GRI application level of A+ of the GRI "G3.1" Guidelines as published in the GRI index section is not fairly stated in all material respects.

Our key observations and recommendations
We have provided a confidential Management Letter containing our observations and recommendations made during the course of our work to BG Group management. Without affecting our assurance opinion, our key observations and recommendations are summarised below:

We note BG Group's progress during 2012 and have agreed with BG Group that the company will consider the following related issues during the year ahead:

- Creation of the Sustainability Report Project and Editorial Boards contributed towards BG Group's increased coverage in the Sustainability Report of longer term strategic risks. We recommend that BG Group should review key sustainability performance data to ensure they continue to reflect BG Group's most material issues and performance indicators used internally; and further develop appropriate medium and long term targets across a broad range of sustainability subject areas;

- BG Group increased coverage in the Sustainability Report on contractor management. Improvements are needed to data collection and management systems to enable better reporting of contractor numbers and hours worked; and
- BG Group's responsiveness to issues raised through the 2012 stakeholder engagement and materiality review was evidenced in this year's Sustainability Report, including greater coverage of biodiversity, contractor management, revenue and tax transparency, socio-economic impacts and fraud management. We recommend that BG Group should continue to refine the approach to reporting on these areas during 2013.

Our key recommendations relating to specific issues and functions are:

- Climate change: BG Group launched new five-year greenhouse gas emissions intensity and sulphur dioxide targets and the Sustainability Report includes data on scope 3 emissions for the first time. We recommend that progress against the new five-year greenhouse gas emissions intensity and sulphur dioxide targets should be reported next year;
- Safety: the Sustainability Report describes increased efforts to manage health and safety, in particular at assets such as QGC where safety performance is significantly different to operations elsewhere in the Group. We recommend a continued focus on improving safety performance (employees and contractors);
- Occupational illness: we note a number of initiatives have been introduced to counter occupational illnesses such as heat stress. Our interviews suggested that occupational illnesses are underreported, we therefore recommend that additional measures are taken to encourage a positive culture of reporting and increased focus on health risks that have a significant impact on the health employees;
- Diversity: BG Group reports a new objective to develop a diversity strategy, including detailed targets and an implementation plan. Progress against this objective should be included in next year's report; and
- Data collection and reporting systems: we observed well developed systems and processes for the collection and reporting of the sustainability performance data at Group and asset level. Our work this year highlighted the following opportunities for improvement:
  - Hours worked: in our statement last year we made a recommendation relating to hours worked at asset level. This year we recommend that Group should continue to enhance the guidance provided to assets on data collection, reporting and review processes for hours worked of employees and contractors.
  - Social investment: we noted improved internal review and validation of social investment spend at the asset level. This year we recommend: the Group data collection system should be improved with greater automation and standardisation; and increased guidance should be given to the assets.

for DNV Two Tomorrows Limited
London
28th March 2013

Jon Woodhead
Director

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LEARNING FROM OUR ASSURANCE

AREAS FOR IMPROVEMENT IDENTIFIED IN 2011 ASSURANCE PROCESS	STATUS	OUR PROGRESS IN 2012
Strategic oversight of the Group's overall approach, including direction setting, integration between functions related to sustainability on an ongoing basis, coverage of longer-term strategic risks and opportunities, and the development of short and long-term targets	Ongoing	● Strategic oversight , direction setting, longer-term strategic risks and opportunities, integration between functions During 2012, we developed an overarching concept of sustainability which is set out in the Chief Executive's introduction to our sustainability web pages. This concept was endorsed by the Board Sustainability Committee (SC) and the SC's Terms of Reference have been amended accordingly. This concept is applied in existing countries of operation through licence to operate strategies developed by our teams on the ground in consultation with the Policy and Corporate Affairs (PCA) function. That work is based on an assessment of: the political and social context in which we operate; the views of a wide range of stakeholder groups; and the risks to our business that context gives rise to. It involves the development of integrated plans to ensure that we are aligned with the interests of our stakeholders in a way that manages those risks, and that progress is measurable. Most strategies have now been drawn up. They will be updated on an annual basis. They are reviewed by our Group Executive Committee (GEC) and, in the most significant cases, by the SC. The Group's concept of sustainability is also routinely applied to exploration or other business opportunities in new countries. In that regard, the GEC and SC have underlined the importance of: • ensuring that our investments are diversified by both country and region, and based on a careful assessment of geopolitical risks • drawing up plans for all new countries, setting out how we plan to build broadly based stakeholder support for our future operations • working to ensure that our presence is seen by external observers and civil society as a net positive on issues of human rights and environmental stewardship. Both the GEC and the SC are regularly briefed about the different opportunities under consideration. **Longer-term strategic risks and opportunities** During the year, we also developed a more rigorous framework for assessing new market opportunities which takes into account the political, social, corruption and environmental risks as well as the wider geopolitical context. This framework stresses the importance of assuring that we consider, in any new market, whether we can operate in a way consistent with our Business Principles. **Target setting** We improved target setting by individual functions this year, with targets in this report that are SMARTer than before. At Group level, we put in place a new greenhouse gas (GHG) reduction target, to run to 2017. A new aspiration was introduced in 2012, to have 20% women in senior roles by 2020.

Learning from our assurance continued

AREAS FOR IMPROVEMENT IDENTIFIED IN 2011 ASSURANCE PROCESS	STATUS	OUR PROGRESS IN 2012
A greater forward-looking focus in future sustainability reports and additional detail on the BG Group employee and contractor profile and management approach	Ongoing Completed	**Forward-looking focus** The 2012 Sustainability Report has been structured around material issues, many of which are long-term challenges for which we have to plan (for instance climate change, safety, unconventional gas and human resourcing). This means our report is by definition forward-looking. Another example in the 2012 report is the section on our socio-economic impact. This section looks ahead to our future approach to reporting our socio-economic impact by country, recognising the trend to more detailed and transparent reporting. The report also includes country profiles of BG Group operations in two areas of long-term strategic importance for the Group: Brazil and Australia. These profiles set out initiatives and plans in these countries which will be of importance to the Group and its stakeholders for many years to come. **Contractor and employee profile and management approach** This year's report provides more detail on our workforce profile, by providing information on the number and type of employees and contractors at our facilities and offices across the world and discussing the issues of workforce composition, local recruitment and future resource requirements. The report also provides specific information on our One Team approach to the management of employees and contractors. It sets out in detail our approach to working with contractors, particularly in the area of safety. We have also provided a detailed study of safety in QGC which includes contractor management topics.

Learning from our assurance continued

AREAS FOR IMPROVEMENT IDENTIFIED IN 2011 ASSURANCE PROCESS	STATUS	OUR PROGRESS IN 2012
How to capitalise on improvements in stakeholder engagement and materiality review by further refining these processes in 2012, and using the outputs to inform the consideration of the overall approach to sustainability and future reporting	Ongoing	**Improvements in materiality and stakeholder engagement** We took further steps to strengthen our approach to materiality in 2012, building on the changes we introduced in 2011 when we began to formalise the report preparation process and introduced formal consultation with external stakeholders. In 2012, we carried out more extensive research into the issues that have arisen in the year, undertook more external stakeholder consultation, and strengthened our internal processes for developing the report's content. **Future reporting** We created a cross-functional Sustainability Report Editorial Board, which was engaged throughout the report preparation process. We also set up a Sustainability Report Project Board, chaired by a member of the GEC, and involving several heads of functions to oversee the report preparation process. The Project Board met at key times throughout the process to review progress and provide guidance on the report's content. The cross-functional group that made up the Editorial Board plans to meet monthly through the year to discuss sustainability issues and how these will be reflected in future reporting. In 2013, we plan to: • hold a half-day offsite to review the report process and potential improvements • review the materiality research and stakeholder engagement process • in particular, look at how to build our engagement of local community stakeholders through our own operations globally, aiming to extend reporting on local issues and capture feedback where possible • conduct a best practice review • hold a half-day offsite to plan the 2013 report • provide feedback from this process to the GEC and the SC, when appropriate.
Greenhouse gas target We understand that work is on-going by BG Group to develop a new GHG target beyond 2012. BG Group is considering a range of options for the new target, including absolute and normalised targets, coverage of Scope 3 emissions and setting baseline and stretch targets.	Completed	**Greenhouse gas target** A new target has been set to reduce GHG emissions intensity by 10% by 2017; this is reported on fully in the Sustainability Report. To drive change within our operations, each facility has a GHG intensity target for 2013 and further targets will be developed for subsequent years. In 2013, facilities must also develop Energy Management Plans which describe the energy efficiency opportunities in each asset and how the asset will contribute to achieving the five-year target. Energy Management Plans will be reviewed and endorsed by the Head of Environment in order to ensure adequate and consistent quality. In developing the new GHG target we analysed the lessons learnt from the previous target and the different types of targets we could adopt, including absolute targets, against the back-drop of BG Group's underlying forecast growth in production and changing portfolio. To reflect this, a new target based on an emissions-intensity metric was chosen which allows us to continue to improve our performance whilst we grow. This, coupled with the delivery tools above, will help us to embed this across the company. As part of the analysis, an external review was conducted by DNV Two Tomorrows. This showed that setting an intensity-based target was good practice for a growing company where operational emissions were forecast to rise. Read about Scope 3 emissions in the Report

Learning from our assurance continued

AREAS FOR IMPROVEMENT IDENTIFIED IN 2011 ASSURANCE PROCESS	STATUS	OUR PROGRESS IN 2012
Biodiversity, diversity and inclusion We recommend that BG Group should consider the development of a Group-wide approach to biodiversity, and also to employee diversity and inclusion.	Completed	**Biodiversity** In 2012, we revised the Environmental Standard and now require Biodiversity Action Plans to be reviewed and endorsed by the Head of Environment in order to ensure adequate and consistent quality. **Diversity and inclusion** We reviewed diversity in detail and developed a new diversity statement, including an aspiration, in relation to gender diversity, to have 20% women in leadership positions by 2020. Our Employee Support Standard and the Unacceptable Behaviour Standard promote an inclusive working environment.
Data collection and reporting We recommend that BG Group should enhance guidance provided to assets on data collection, reporting and review processes for hours worked via the appropriate HSSE Standard.	Completed	In 2012, we reviewed processes for reporting hours. We worked closely with those Group operations where questions had been raised, to ensure their systems for reporting hours were as accurate as practicable. We checked the way hours were captured during a number of HSSE audits of assets, to assure ourselves that the processes were robust. We are confident that the margin of error in reporting does not materially affect the total recordable case frequency (TRCF) figures reported.
Social investment We recommend improvements to the data collection, record keeping and review processes at asset level.	Completed	We increased the accountability at the asset level and supervision from Group. All the social investment data had to be signed off by the Head of PCA or equivalent member of the asset management team, authenticating that they had cross-checked the data and were signing off on its accuracy.

X Signifies completed
We worked on this target in 2012 and completed all the associated tasks.

Y Signifies ongoing
We made some progress on this target but did not complete all the associated tasks.