

# Sustainability Review 2010



[bp.com/sustainability](http://bp.com/sustainability)

2 A letter from our group chief executive / 4 How BP is changing  
6 Gulf of Mexico oil spill / 14 How we operate / 22 Energy future  
30 Safety / 34 Environment / 38 Society





# What's inside?

We recognize that the events of 2010 have impacted many people, from local communities and businesses in the Gulf Coast region to our customers, colleagues, partners and shareholders around the world. We feel a deep sense of responsibility to everyone affected by what we do and how we do it – not just in the Gulf of Mexico, but wherever we operate. And not just this year, but every year.

In this Sustainability Review, we look at what that sense of responsibility means in practice. We discuss how the accident and oil spill are shaping how we do business, and the changes we are making to our portfolio and organization.

Our website plays an integral part in our sustainability reporting, covering a wider set of issues and reporting on them in more depth. The website includes detailed information about our environmental and safety performance, as well as case studies that demonstrate our sustainability efforts in action.

 **Full sustainability reporting**  
[bp.com/sustainability](http://bp.com/sustainability)

**Front cover image**  
Skimmer engaged in clean-up operations in the Gulf of Mexico, US

IFC	<b>This is BP</b> Our strategy and key performance data	
2	<b>A letter from our group chief executive</b> Bob Dudley reflects on the events of 2010, and how we're working to earn back the trust of all our stakeholders	
4	<b>How BP is changing</b> Making BP a safer, stronger, more valuable and more sustainable company	
6	<b>Gulf of Mexico oil spill</b> The Deepwater Horizon accident, our response and our environmental and socio-economic commitments in the region	
14	<b>How we operate</b> Governance from board to operational level; our values and code of conduct; human rights; and stakeholder engagement	
22	<b>Energy future</b> Meeting the demand for secure, affordable energy that enables economies to prosper and grow – while avoiding climate change	
30	<b>Safety</b> A systematic approach to safety group-wide; our safety record in the US; and how we aim to prevent oil spills, accidents and fatalities	
34	<b>Environment</b> Managing our environmental impacts from project start to finish; a local focus on issues, including water management; and how we respond to oil spills	
38	<b>Society</b> Working to provide a positive socio-economic impact in the countries where we operate; and fighting corruption	
41	<b>Our approach to reporting</b> Tackling sustainability issues in print and online	
42	<b>Assurance statement</b> Ernst & Young's conclusions about BP's reporting	

# This is BP

## BP in figures<sup>a</sup>

For the year ended 31 December	2006	2007	2008	2009	2010
<b>Safety</b>					
Fatalities – employees	0	3	2	0	<b>0</b>
Fatalities – contractors	7	4	3	18	<b>14</b>
Day away from work cases – workforce	188	167	175	134	<b>408</b>
Day away from work case frequency (DAFWCF) <sup>b</sup> – workforce	0.085	0.075	0.080	0.069	<b>0.193</b>
Recordable injuries – workforce	1,067	1,060	951	665	<b>1,284</b>
Recordable injury frequency (RIF) <sup>b</sup> – workforce	0.48	0.48	0.43	0.34	<b>0.61</b>
Hours worked – employees (million hours)	207	204	195	174	<b>168</b>
Hours worked – contractors (million hours)	236	241	245	216	<b>255</b>
Total number of losses of primary containment	—	—	658	537	<b>418</b>
Number of oil spills – loss of primary containment <sup>c</sup>	417	340	335	234	<b>261</b>
<b>Environment</b>					
Number of oil spills – to land and water <sup>c</sup>	300	213	170	122	<b>142</b>
Volume of oil spilled (million litres)	2.2	1.0	3.4	1.2	<b>1.7<sup>d</sup></b>
Volume of oil unrecovered (million litres)	0.4	0.3	0.9	0.2	<b>0.8<sup>d</sup></b>
Direct carbon dioxide (CO <sub>2</sub> ) <sup>e</sup> (million tonnes (Mte))	59.3	59.2	57.0	60.4	<b>60.2<sup>f</sup></b>
Indirect carbon dioxide (CO <sub>2</sub> ) <sup>g</sup> (Mte)	10.1	10.7	9.2	9.6	<b>10.0<sup>f</sup></b>
Direct methane <sup>e</sup> (Mte)	0.24	0.20	0.21	0.22	<b>0.22<sup>f</sup></b>
Direct greenhouse gas (GHG) emissions <sup>e</sup> (Mte CO <sub>2</sub> equivalent (CO <sub>2</sub> e))	64.4	63.5	61.4	65.0	<b>64.9<sup>f</sup></b>
Flaring (E&P) (thousand tonnes (kte) of hydrocarbons)	1,241	1,124	1,718	2,149	<b>1,671<sup>f</sup></b>
Customer emissions <sup>h</sup> (MteCO <sub>2</sub> )	539	521	530	554	<b>573</b>
Environmental and safety fines (\$ million)	2.5	22.5	1.1	66.6	<b>52.5</b>
Environmental expenditure (\$ million)	4,026	3,293	2,520	2,483	<b>18,400</b>
<b>People<sup>i</sup></b>					
Number of employees – group <sup>k</sup>	97,000	98,100	92,000	80,300	<b>79,700</b>
Number of employees – group leadership <sup>k</sup>	625	624	583	492	<b>482</b>
Women in group leadership <sup>k</sup> (%)	17	16	14	14	<b>14</b>
Women at management level <sup>k</sup> (%)	21	22	22	23	<b>24</b>
People from UK and US racial minorities in group leadership <sup>k</sup> (%)	5	5	6	6	<b>7</b>
People from beyond the UK and US in group leadership <sup>k</sup> (%)	20	19	19	21	<b>19</b>
Employee turnover <sup>l</sup> (%)	—	—	15	15	<b>15</b>
OpenTalk cases <sup>m</sup>	1,065	974	927	874	<b>742</b>
Dismissals for non-compliance and unethical behaviour	642	944	765	524	<b>552</b>
Benefits to employees – including wages, salaries, share-based payments, benefits and pensions (\$ million)	10,643	11,511	12,280	12,216	<b>11,772</b>
Contracts terminated or not renewed due to non-compliance or unethical behaviour	69	48	22	30	<b>14</b>

Our data does not include the oil spill volume or the greenhouse gas emissions associated with the Deepwater Horizon incident. These are highlighted in green.<sup>d,f</sup>

### Cautionary statement

BP Sustainability Review 2010 and [www.bp.com/sustainability](http://www.bp.com/sustainability) contain certain forward-looking statements concerning the businesses, operations and strategy of BP. By their nature, forward-looking statements involve risks and uncertainties because they relate to events and depend on circumstances that will or may occur in the future. Actual results may differ from those expressed in such statements depending on a variety of factors, including future levels of industry product supply; demand and pricing; operational problems; general economic conditions; political stability and economic growth in relevant areas of the world; changes in laws and governmental regulations; regulatory action; exchange rate fluctuations; development and use of new technology; changes in public expectations and other changes in business conditions; the actions of competitors; natural disasters and adverse weather conditions; wars and acts of terrorism or sabotage; and other factors discussed elsewhere in this document and at [www.bp.com/riskmanagement](http://www.bp.com/riskmanagement). Material is used within this document to describe issues for voluntary sustainability reporting that are considered to have the potential to significantly affect sustainability performance in the view of the company and/or are expected to be important in the eyes of internal or external stakeholders. Material for the purposes of this document should not, therefore, be read as equating to any use of the word in other BP p.l.c. reporting or filings.

BP Annual Report and Form 20-F 2010 and BP Summary Review 2010 may be downloaded from [www.bp.com/annualreport](http://www.bp.com/annualreport). No material in this Sustainability Review forms any part of those documents. No part of this Sustainability Review or [www.bp.com/sustainability](http://www.bp.com/sustainability) constitutes, or shall be taken to constitute, an invitation or inducement to invest in BP p.l.c. or any other entity and must not be relied upon in any way in connection with any investment decisions. BP p.l.c. is the parent company of the BP group of companies. Unless otherwise stated, the text does not distinguish between the activities and operations of the parent company and those of its subsidiaries.

<sup>a</sup> Quantitative performance indicators have been chosen, with external input, to reflect the most important sustainability issues for BP. Data is reported here only from operations under BP operational control, except for GHG emissions. We use consistent processes that seek to provide acceptable estimates to enable year-to-year comparisons.

<sup>b</sup> DAFWCF and RIF are the annual frequency per 200,000 hours worked.

<sup>c</sup> Oil spills are defined as any liquid hydrocarbon release of more than or equal to one barrel (159 litres, equivalent to 42 US gallons).

<sup>d</sup> Although there are several third-party estimates of the flow rate or total volume of oil spilled from the Deepwater Horizon incident, we believe that no accurate determination can be made or reported until further information is collected and the analysis, such as the condition of the blowout preventer, is completed. See *BP Annual Report and Form 20-F 2010*, page 201, for information about the volume used to determine our estimated liabilities.

<sup>e</sup> Direct GHG emissions are the physical emissions from operations. Emissions represent all consolidated entities and

BP's share of equity-accounted entities except TNK-BP.

<sup>f</sup> We have not included any emissions from the Deepwater Horizon incident and the response effort due to our reluctance to report data that has such a high degree of uncertainty.

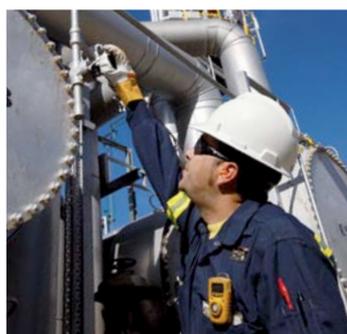
<sup>g</sup> Indirect GHG emissions are a consequence of the import by operations of steam, electricity and heat from third-party sources. Emissions represent all consolidated entities and BP's share of equity-accounted entities except TNK-BP.

<sup>h</sup> Based on BP's total reported production of natural gas, natural gas liquids and refinery throughputs.

## Our strategy

We are determined that BP will be a safer, more risk-aware business. We will deliver on our commitments from the Gulf Coast incident and work hard to earn back the trust in our operations. We will rebuild value for our shareholders by re-establishing our competitive position

within the sector by playing our part in meeting the world's growing demand for energy, as well as participating in the transition to a low-carbon economy.



### Exploration and Production

Our strategy is to grow long-term value by continuing to build a portfolio of enduring positions in the world's key hydrocarbon basins, focused on deepwater, gas and giant fields. This will be enabled by strong relationships built on mutual advantage, deep knowledge of the basins, technology and the development of capability along the value chain in exploration, development and production.

### Refining and Marketing

Our strategic focus is on holding a portfolio of quality, integrated, efficient positions and accessing available market growth in emerging markets. Our objective has been to improve our performance by focusing on achieving safe, reliable and compliant operations, restoring missing revenues and delivering sustainable competitive returns and cash flows.

### Alternative Energy

Our focus is on low-carbon businesses and future growth options that we believe have the potential to be a material source of low-carbon energy and are aligned with BP's core capabilities. These are biofuels, wind and solar, along with demonstration projects and technology development in carbon capture and storage.

### Gulf Coast Restoration Organization

This separate organizational unit was established to provide the necessary leadership and dedicated resources to ensure BP meets its commitment to fulfil its clean-up responsibilities and to support the long-term effort to restore the Gulf Coast.

For the year ended 31 December	2006	2007	2008	2009	2010
<b>Performance</b>					
Total hydrocarbons produced (thousand barrels of oil equivalent (mboe) per day)	3,926	3,818	3,838	3,998	<b>3,822</b>
Reserves replacement ratio <sup>n</sup> (%)	113	112	121	129	<b>106</b>
Total refinery throughputs (thousand barrels per day (mb/d))	2,198	2,127	2,155	2,287	<b>2,426</b>
Total petrochemicals production <sup>o</sup> (thousand tonnes (kte))	14,426	14,320	12,835	12,660	<b>15,594</b>
Replacement cost profit (loss) <sup>p</sup> (\$ million)	22,222	18,370	25,593	13,955	<b>(4,914)</b>
Taxes to governments – comprising income taxes and production taxes paid (\$ million)	17,690	13,267	19,690	10,309	<b>12,071</b>
Dividends paid to shareholders (\$ million)	7,686	8,106	10,342	10,483	<b>2,627</b>
Contribution to communities <sup>a</sup> (\$ million)	106.7	135.8	125.6	106.8	<b>115.2</b>

<sup>i</sup> This includes \$14,557 million environmental expenditure costs relating to the Gulf of Mexico oil spill.  
<sup>j</sup> Employees are defined as individuals who have a contract of employment with a BP group entity.  
<sup>k</sup> Employee figures as at 31 December.  
<sup>l</sup> These figures relate to non-retail employees only. In 2010, voluntary turnover (resignations and retirements) was 5%.  
<sup>m</sup> Minor amendments have been made to comparative periods 2006-2008.

<sup>n</sup> Combined basis of subsidiaries and equity-accounted entities, excluding acquisitions and disposals.  
<sup>o</sup> Petrochemicals production reported within Refining and Marketing. Minor amendments have been made to comparative periods.  
<sup>p</sup> Replacement cost profit or loss reflects the replacement cost of supplies. The replacement cost profit or loss for the year is arrived at by excluding from profit inventory-holding gains and losses and their associated tax effect. Inventory-holding gains and losses represent the difference between the cost of sales calculated

using the average cost to BP of supplies acquired during the year and the cost of sales calculated on the first-in first-out method, after adjusting for any changes in provisions where the net realizable value of the inventory is lower than its cost. Inventory-holding gains and losses, for this purpose, are calculated for all inventories except for those that are held as a part of a trading position and certain other temporary inventory positions. Replacement cost profit for the group is a non-GAAP measure.

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## A letter from our group chief executive

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Each year, BP's Sustainability Report looks at how our progress contributes towards our long-term prospects as a company and to society as a whole. This report should, therefore, start with a clear acknowledgement – 2010 was a year that called BP's sustainability into question.

The tragic accident in the Gulf of Mexico on 20 April 2010 cost 11 lives, leading to a major oil spill and a widespread loss of trust in BP. We are so very sorry for what happened. Nothing can replace the people who died and our thoughts remain with their loved ones.

Our task now is to earn back the trust that was lost and build a sustainable BP for the future. This report explains the measures we are taking to strengthen safety, restore trust and build shareholder value responsibly for the long term.

### The Gulf of Mexico accident and response

The explosion on the Deepwater Horizon oil platform and the consequent oil spill were terrible events that should never have happened. Having grown up in Mississippi, I know the Gulf Coast well and I have been deeply saddened by the widespread impact on the local environment and economy.

We took responsibility for the clean-up immediately. The response effort was one of unprecedented scale, which – at its peak – involved 48,000 people, 6,500 vessels and 125 aircraft. We set up the \$20-billion Deepwater Horizon Oil Spill Trust for claims and certain other costs, and have provided hundreds of millions of dollars for economic, health and environmental programmes. We suspended dividend payments for three quarters and initiated \$30 billion of asset sales to provide confidence that we could meet our commitments – in 2010 and the coming years.

### A safer, stronger BP

As well as meeting our obligations in the Gulf of Mexico, we are now focused on building a safer and stronger BP everywhere we work. This determination will drive how we manage risk, how we operate, how we partner with others and how we reward our employees.

To ensure that our enhancements to safety and risk management are applied quickly, thoroughly and effectively, we are carrying out a wide-ranging change programme. We have set up a new safety and operational risk function that has its specialist personnel embedded in BP's businesses, working alongside the line management to guide, advise and, if needed, to intervene.

We have accepted and are implementing the recommendations made in our investigation report, published in September 2010. We are sharing what we have learned about deepwater drilling and oil spill response with the industry, governments and regulators. We are co-operating with a series of investigations, and we are supporting initiatives to bring about necessary regulatory change.

During 2010, we suffered three fatalities besides those sustained in the Deepwater Horizon accident – a loss of life that we deeply regret – and our overall recordable injury frequency rose as a result of response activities, such as beach cleaning.

We fully understand the need to deliver safe and productive operations. We have made some progress, but there is more to do and we know that. Given the nature of the challenges we take on, BP can never eliminate risk, but we can work with others to better understand, limit and manage risk.

Insight and wisdom from beyond our own industry will help in this regard. We have engaged with experts from other sectors and I am pleased that our recent board appointments include Frank L 'Skip' Bowman, former head of the US Navy's Naval Nuclear Propulsion Programme; Brendan Nelson, former vice-chairman of KPMG, who has vast financial and auditing experience; and Phuthuma Nhleko, who brings deep experience of emerging markets.

### Reshaping BP

BP's mission for 2011 and beyond is to grow value for our shareholders in a way that is safe and sustainable. 2011 will be a year of consolidation in which we focus on our number one priority – safety – and strengthen the drivers of long-term performance, such as risk management, capability and relationships. We will invest in areas where we excel, such as exploration, and we will enter into new types of relationships with partners.

We are also divesting businesses that are more valuable or strategic to others than ourselves. This includes reshaping our downstream business to better reflect the changing patterns of global energy demand, where growth is concentrated in emerging markets. One outcome of this strategy is our decision to divest some US-based businesses, notably the Texas City and Carson refineries. We very much appreciate the work that our teams have done there. At Texas City, great progress

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has been made in safety since the accident there in 2005. We are committed to handling the transition to other operators with respect and sensitivity, in keeping with our belief in being a responsible member of each community where we operate.

We are also developing groundbreaking strategic partnerships with national oil companies and other resource holders. Our new partnerships with Rosneft in Russia and Reliance Industries in India illustrate this strategy in action. With Rosneft, we will seek to explore and develop the Russian Arctic continental shelf, and have agreed to jointly establish an Arctic technology centre in Russia to promote safety, environmental integrity and emergency-spill-response capability. Through our agreement with Reliance, we will have a major stake in a large offshore basin and create a joint venture to source and market gas in in the growing Indian market.

#### The changing energy landscape

We create value for shareholders by providing the energy that a growing population needs to generate progress and prosperity. Our recent projection of energy trends, *BP Energy Outlook 2030*, indicates in its 'base case' that primary energy use could grow by nearly 40% over the next 20 years, with more than 90% of demand growth coming from emerging economies.

Whatever precise trajectory demand takes, all forms of energy will be required to meet rising demand, with fossil fuels remaining an essential part of the energy mix for decades. With global oil production from existing fields declining by around 5% a year, it's vital that new fields are discovered and developed. This is why BP will continue to move farther into harsh, remote and complex geographies, from deep water to the Russian Arctic; from oil sands and unconventional gas to giant fields – such as Rumaila in Iraq. We believe we can help meet energy demand and create returns for investors by applying our distinctive skills, capabilities and technologies in these demanding areas.

We remain acutely aware that we must continue to address the challenge of climate change. As a company, we are acting to limit greenhouse gas emissions. We are building our business in natural gas, which provides a lower-carbon alternative to coal and represents an important transition resource from fossil fuels to renewables. We are also including a carbon price in new project development plans to encourage efficiency and we continue to invest in low-carbon renewable energies.

Since 2005, BP has invested more than \$5 billion in its alternative energy businesses and we expect to invest a further \$1 billion in 2011 to participate in the rapidly growing low-carbon energy markets. We are focusing investment on lower-carbon options that best match our core strengths and future market growth. Our biofuels business is well positioned to address opportunities in a rapidly growing sector. We are also investing in low-carbon power, including a substantial and growing wind business based in the US.

While it is ultimately for governments to determine the pace of transition to a lower-carbon economy, BP is committed to making a progressive contribution. In my experience, BP and its employees feel as strongly about the long-term sustainability of the world as anyone else, and we want to play our part in addressing the complex issues involved.

#### Sustainable value

2010 shook BP to its core. To those who ask if we truly understand the implications, let me say firmly that 'we get it'. We understand that business-as-usual is not an option, and we are making substantial changes to the way we work.

I hope the actions I have outlined show that, after a profoundly difficult year, BP is addressing its weaknesses and enhancing its strengths. Our goal is to rebuild this company so it can create value safely and sustainably. I know the readers of this report will hold us to that objective and I welcome your interest and scrutiny.



**Bob Dudley**  
Group Chief Executive

22 March 2011



**Speeches by Bob Dudley**  
[bp.com/speeches](http://bp.com/speeches)

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**How BP is changing** Re-earning and keeping the trust of society by operating safely and responsibly is the only way we can fulfil our purpose of creating sustainable shareholder value

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The tragic events of 2010 severely impacted trust in BP. This followed a period when we had made progress in response to two other events – the Texas City explosion and the pipeline leak in Alaska. The causes and character of these three events were quite different, but all have affected levels of confidence in our company.

In response, we are developing and implementing a comprehensive programme to strengthen safety, risk management and compliance across BP. Much of this is covered in our sustainability reporting; we summarize some of the key changes here.



Atlantis platform, Gulf of Mexico, US

### **Safety and operational risk**

We have introduced a more powerful safety and operational risk (S&OR) function, deploying its representatives to operating businesses to guide and, if needed, intervene in technical activities. The function operates independently of the group's businesses and is represented on BP's most senior executive team. S&OR will monitor operations with the aim of ensuring they comply with BP's operating management system – our group-wide system that provides a consistent and systematic approach to safety, risk management and operational integrity.

**Read more about how we are managing operational risk on page 16**

### **Risk management system**

Risk management in BP consists of the whole system of standards, processes, tools and methodologies used to identify, monitor and manage risk. We are reviewing this system to ensure we use simple, consistent, joined-up processes across BP. Embedding these changes will take time as they are not simply about using enhanced processes but about improving how employees consider risk day by day.

**Read more about corporate governance and risk management on page 15**

### **Restructuring our upstream business**

We have reorganized our upstream business into three separate divisions: Exploration, Developments and Production. Each division is led by a newly appointed head reporting directly to the group chief executive. This provides increased visibility of each division at the executive level. The restructure is designed to enhance the way the segment operates, with a particular focus on how we manage risk, deliver common standards and processes, and build human and technical capability for the future. For example, all well drilling activity will be carried out by a single, centralized wells team.

**Read more about our upstream business at [bp.com/annualreport](http://bp.com/annualreport)**

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## Values and behaviours

Ultimately, it is individuals who determine the effectiveness of rules, systems and structures. We are now working to review, renew and enhance the values and behaviours expected of everyone who works for BP. We will be connecting the values, behaviours and the BP code of conduct explicitly, with the objective of helping to ensure that they are applied consistently in the way we work each day – all around the world.

**[Read more about our values and code of conduct on page 18](#)**

## Individual performance and reward

While safety has long been a component in how we evaluate and reward people, we must ensure that putting safety at the heart of all operations is appropriately and permanently incentivized across BP. Our new performance management system sets further explicit links between safety and reward, and links with our values and behaviours. Careful decision-making should be a natural priority for our workforce, but we believe there is potential to increase safe and compliant behaviour by making responsibility explicit in evaluations and rewards.

**[Read more about safety management on page 31](#)**

## Contractor management

Many of our operations – including deepwater drilling – rely on the expertise of contractors. We are reviewing how we work with contractors and other industry partners, both onshore and offshore. What we learn from this will inform future relationships and help us to optimize the oversight and management of safety and operational risk.

**[Read more about working with suppliers and partners on page 17](#)**

## Technology

Technology underpins risk management, business value creation and informs strategic decisions. We are repositioning technology to meet 21st-century energy demand safely and responsibly by deepening the science base and standardizing our technology management systems and processes.

**[Read more about meeting the energy challenge on page 24](#)**



Technicians at work at Zhuhai LPG plant, Zhuhai, China

# Gulf of Mexico oil spill

BP recognizes that the Deepwater Horizon accident has had a significant impact on many aspects of life along the Gulf Coast, ranging from environmental and wildlife to economic and social issues

→ **Gulf of Mexico response**  
[bp.com/gulfofmexico](http://bp.com/gulfofmexico)

## The Deepwater Horizon accident

The explosion that resulted in the deaths of 11 people and the oil spill affecting the environment and livelihoods of many in the Gulf region

Page 7



## Our response

Our efforts to stop the leak, compensate the people and communities affected, and protect the local environment and wildlife

Page 8



## Our commitments

Our long-term support for the environmental restoration and economic well-being of the Gulf region

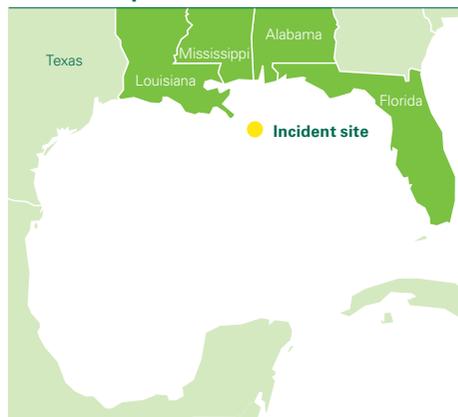
Page 12



## The Deepwater Horizon accident

On the evening of 20 April 2010, a gas release and subsequent explosion occurred on the Deepwater Horizon oil rig working on the Macondo exploration well for BP in the Gulf of Mexico

### Incident map



The majority of the oil that reached the shoreline from the Deepwater Horizon incident impacted Louisiana, Mississippi, Alabama and Florida

The fire burned for 36 hours before the rig sank, and hydrocarbons leaked into the Gulf of Mexico for 87 days before the well was closed and sealed. Fundamentally, the accident involved a loss of control over the pressure in the well followed by the failure of the well's blowout preventer, a specialized valve designed to maintain consistent conditions. After the initial explosions, the blowout preventer's emergency functions failed to seal the well, allowing the leak to occur.

Eleven people died as a result of the accident and others were injured. We deeply regret this loss of life and recognize the tremendous loss suffered by the families, friends and co-workers of those who died. We also regret the damage caused to the environment and livelihoods of those in the communities affected. We are putting in place measures to help ensure it does not happen again.

We have acted to take responsibility for the clean-up, to respond swiftly to compensate people affected by the impact of the accident, and to look after the health, safety and welfare of the large number of residents and people who helped respond to the spill. As of 31 December 2010, we had spent \$17.7 billion on our response activities. Throughout, we have sought to work closely with the government, local residents, our shareholders, employees, the wider industry and the media.

We are committed to understanding the causes, impacts and implications of the Deepwater Horizon accident and acting on the lessons from it. We will continue to share what we have learned with governments, the energy industry and the wider community.

### Investigating the incident

In the immediate aftermath of the explosion, BP launched an investigation, drawing on the expertise of more than 50 technical and other specialists from within BP and the industry. This investigation was led by BP's head of safety and operations, and performed independently from BP's accident response.

The BP investigation concluded that no single cause was responsible for the accident. The investigation instead found that a complex and interlinked series of mechanical, human judgement, engineering design, operational implementation and team interface failures, involving several companies, including BP, contributed to the accident.

The investigation team made 26 recommendations specific to drilling, which BP has accepted and is implementing across its worldwide drilling operations. The recommendations include measures to strengthen contractor management, as well as assurance on blowout preventers, well control, pressure testing for well integrity, emergency systems, cement testing, rig audit and verification, and personnel competence.

Specialists from across BP have developed an integrated action plan for the recommendations, which apply to BP, our partners and our service providers. To confirm the delivery of each action within BP, we are setting up a programme of continuous self-verification and independent auditing by our safety and operational risk function.

### External investigations

Several external investigations into the Gulf of Mexico oil spill and response are under way in the US, including those by the National Commission (requested by US President Barack Obama), the Marine Board, the Coast Guard, the National Academy of Engineering, the Chemical Safety Board, Congress, the Department of Justice, and the Securities and Exchange Commission.

The National Commission's report, released in January 2011, identified certain failures of management and decision making within BP and its contractors, as well as regulatory failures, to be contributing factors. The report recommended enhanced government oversight and regulatory frameworks, the creation of a private sector entity to improve industry safety standards, the strengthening of environmental safeguards, and co-operation between industry and government toward technical advancement in well-containment and clean-up capabilities.

As findings from these various investigations are made public, we will link to them from [bp.com/gulfofmexico](http://bp.com/gulfofmexico).



### Preventing oil spills

Find out more on page 33

## Our response This was a situation never encountered before and required a number of solutions that were new to BP and the industry

### Timeline

#### 20 April

Explosion occurs on the Deepwater Horizon rig.

#### 22 April

Deepwater Horizon rig sinks.

#### 23 April

The 11 missing people are declared dead.

#### 2 May

Drilling begins on a relief well to permanently seal the leaking oil well.

#### 8 May

Efforts to place a containment dome over the main leak point suspended owing to build-up of hydrates.

#### 16 May

Drilling of second, back-up relief well begins. Riser insertion tube tool becomes operational, initially capturing an estimated 3,000 barrels of oil per day.

#### 29 May

'Top kill' operation to stop oil flow by injecting heavy drilling fluids into the well is deemed unsuccessful.

#### 4 June

'Lower marine riser package' containment cap results in oil and gas being received onboard the *Discoverer Enterprise*.

#### 12 July

Sealing cap to increase containment capacity or potentially shut in the well is in place.

#### 15 July

Oil ceases to flow into the Gulf of Mexico.

#### 9 August

Pressure tests confirm Macondo well cement operation successful.

#### 16 September

The relief well intercepts the Macondo well.

#### 19 September

US Coast Guard deems the well kill operations complete and successful.

### Containing the leak

Within days of the incident occurring, the US federal government formed a Unified Area Command to manage the response effort and communications. The Unified Command members included BP, the US Coast Guard, the US National Oceanic and Atmospheric Administration (NOAA), the US Environmental Protection Agency (EPA), the US Occupational Safety and Health Administration, and many other US federal departments and agencies.

BP, working closely with specialists from many companies, governmental agencies and academia, tackled the leak in multiple, parallel ways.

After the accident, teams immediately set to work to stop the leak at the source, plan relief wells and develop a suite of options to stop, contain and recover the flow. Within weeks, we had begun work on the drilling of two relief wells that would permanently stop the leak. We employed multiple techniques to hasten containing the leak, including fitting caps on the well, using containment systems that pipe oil to vessels on the surface, and sealing the well through the static kill procedure.

#### How much oil was spilled?

Before the well was contained in July, a substantial amount of oil spilled into the Gulf of Mexico. Although there are several third-party estimates of the flow rate or total volume of oil spilled from the Deepwater Horizon, we believe that no accurate determination can be made or reported until further information is collected and the analysis, such as the condition of the blowout preventer, is completed. Once such determination has been made, we will report on the spill volume as appropriate.<sup>1</sup> While we understand that the exact figure is of interest to many, BP's efforts to address the potential environmental and social impacts have not been limited by the precise volume of the spill.

<sup>1</sup> See *BP Annual Report and Form 20-F 2010*, page 201, for information about the volume used to determine our estimated liabilities.



### Managing oil spills

Find out more on page 37



The *Discoverer Inspiration* arrives to install a capping stack to seal the leaking well, 10 July 2010



### Full timeline

[bp.com/responsetimeline](http://bp.com/responsetimeline)

### Compensating the people and communities impacted

BP was determined to respond swiftly and fairly to claims from individuals, businesses and government entities. Most claims were from people or businesses reporting a loss of income or profit as a result of the spill.

We sought to implement a fair and simple claims process aimed at providing funds as quickly as possible. By early May, we had established a claims operation with a toll-free number and the first claims and community outreach offices.

In June 2010, with the aim of improving transparency and objectivity, BP and the US government agreed to appoint Kenneth Feinberg to evaluate and manage individual and business claims. Mr Feinberg had administered the September 11th Victim Compensation Fund and other major funds related to incidents. The Gulf Coast Claims Facility (GCCF), headed by Mr Feinberg, took over responsibility for managing and paying individual and business claims in August 2010.

Separately, BP is directly managing claims and funding requests for losses or expenses incurred by states, parishes, counties, Native American tribes and other government entities. These primarily cover costs associated with response and removal activities, increased public services and loss of revenues due to the incident.

### Deepwater Horizon Oil Spill Trust – \$20-billion fund

BP, in agreement with the US government, set up a \$20-billion trust to provide confidence that claims funds would be available. The fund is designed to satisfy claims adjudicated by the GCCF, final judgments in litigation and litigation settlements, state and local response costs and claims, and natural resource damages and related costs.

During 2010, BP made payments to the trust totaling \$5 billion and is committed to making additional payments of \$1.25 billion each quarter until the end of 2013. BP has pledged certain Gulf of Mexico assets as collateral for the trust.

#### Claims payments to 31 December

**\$400 million**

BP paid out nearly \$400 million in response to more than 150,000 individual and business claims from April to 23 August

**\$2.78 billion**

GCCF paid around \$2.78 billion to individuals, businesses, real estate brokers and nearly 170,000 claimants

**\$1.14 billion**

BP paid \$1.14 billion to federal, state and local governmental entities to cover claims, response and removal costs and payments



- 1** Vessels of Opportunity help with the response effort, Barataria Bay, Louisiana, US
- 2** Boat owners log claims at Boothville-Venice School gym, Louisiana, US
- 3** BP supports tourism at the New Orleans Fish House, New Orleans, US



Approximately 2,500 miles of boom were deployed to contain the oil.



BP employees and retirees brought their expertise from all parts of the business from around the world to the response effort.



About 1.84 million gallons of dispersant were applied, with all applied more than 3 miles from the shoreline.

### Offshore and onshore clean up

From the beginning, BP worked to fight the spill and minimize its impact on the environment by containing, removing or dispersing the oil offshore, and by implementing strategies to protect the shoreline and clean up oil that came ashore. Together, these efforts helped to reduce the amount of oil that reached the shore and environmentally sensitive marsh areas.

The response involved the mobilization of approximately 48,000 people, the co-ordination of more than 6,500 vessels and the deployment of approximately 2,500 miles of boom to contain or absorb the oil.

#### Offshore

Local commercial fishermen and vessel owners helped with clean-up and protection activities through the Vessels of Opportunity programme. With their local knowledge of currents and shorelines, they provided surveillance and transport support, as well as assisting with boom and skim operations.

In efforts to prevent the oil from reaching shore, we used large-scale offshore skimmers and shallow water equipment to scoop up the oily water. We also conducted controlled burning of oil, where conditions were appropriate. Approximately 265,450 barrels of oil were destroyed through controlled burnings and use of fire boom.

We used EPA-approved dispersants to help break down the oil into smaller droplets that could be more easily dispersed through the seawater and degraded by naturally occurring bacteria found in the Gulf of Mexico. No dispersant was applied closer than 3 miles to the shoreline.

To address concerns about the effect of oil and dispersants, the US Food and Drug Administration (FDA) and NOAA developed seafood-testing protocols for evidence of the dispersants used in our response effort. To date, none of the seafood tested by the FDA has shown evidence of posing a threat to human health. By October 2010, the FDA had found that “the overwhelming majority of the seafood tested shows no detectable residue, and not one of the samples shows a residue level that would be harmful for humans.”

#### Beach and marshlands

In partnership with state workforce agencies, BP provided training for almost 11,000 individuals across the Gulf Coast states to monitor beaches, perform onshore clean-up duties and to serve as a contingent workforce available to activate for clean-up when and where necessary.

To help achieve swift and effective cleaning where oil reached shorelines, BP used existing equipment as well as new techniques and equipment developed specifically in response to the accident. For example, we introduced ‘sand sharks’, large machines capable of safely removing tar balls and tar mats buried as deep as 18 inches below the sand; these allowed for beach clean-up while minimizing the sand disruption and avoiding the use of chemicals. In areas where large machinery was not appropriate, BP deployed teams of trained workers to manually clean beaches.

Additionally, in places where oil encroached on fragile marshlands, BP worked closely with state and federal agencies to assess conditions and develop and implement appropriate clean-up plans to help protect the ecosystem.



**Jeff Trandahl**  
Executive Director,  
National Fish and  
Wildlife Foundation

Time was of the essence if we wanted to minimize the effect of the spill on vulnerable species. The Recovered Oil Fund for Wildlife established by BP enabled the NFWF and our partners to put several conservation projects on the ground and realize unprecedented results for wildlife – all within six months.

However, there is more that needs to be done to boost wildlife populations outside of the direct spill area and promote their long-term survival, such as restoring critical oyster beds and increasing fish populations.

### Wildlife rescue and rehabilitation

BP worked with nationally-recognized wildlife groups to develop specific rescue and rehabilitation programmes for nesting turtles, migratory shore birds and other species.

Experts from NOAA, the US Fish and Wildlife Service, the National Park Service, as well as state agencies, helped BP to identify the most sensitive wildlife habitats and prioritize appropriate spill countermeasures. These measures included booming wildlife refuges, state wildlife management areas and rookeries along the coast, as well as using methods to deter wildlife from entering oiled areas.

Within days of the accident, BP established a hotline for the public to be able to report sightings of impacted wildlife. Throughout the response, wildlife rescue and rehabilitation teams worked closely with oil removal and operations teams to prevent and minimize oil reaching sensitive wildlife areas. The teams also worked to take precautions to minimize the impact of oil-removal operations in sensitive wildlife areas.

Once captured and transported to rehabilitation centres, injured wildlife were individually tagged and recorded, assessed by trained wildlife specialists, given appropriate medication, water and food and then cleaned following certified guidelines for each species. Each animal was carefully monitored during the rehabilitation programme. BP worked with a number of wildlife agencies to determine appropriate locations for returning and releasing rehabilitated wildlife along the Gulf Coast.

BP agreed to donate net revenue from oil recovered from the spill to the US National Fish and Wildlife Foundation. As of 31 December, we had provided \$22 million to the foundation.

 **Environmental management**  
Find out more on page 35



### Ernst & Young observation

We saw that BP's materiality process has been used to prioritise the issues related to Deepwater Horizon to be included in this report. Although this process includes consideration of the importance of issues to stakeholders, some groups may consider that their individual concerns have not been addressed. Others will feel that the coverage in the report does not do justice to the complexity of certain issues.



**2,263 birds, 18 turtles and four mammals dead and visibly oiled, as of 31 December 2010, according to the US Fish and Wildlife Service.**



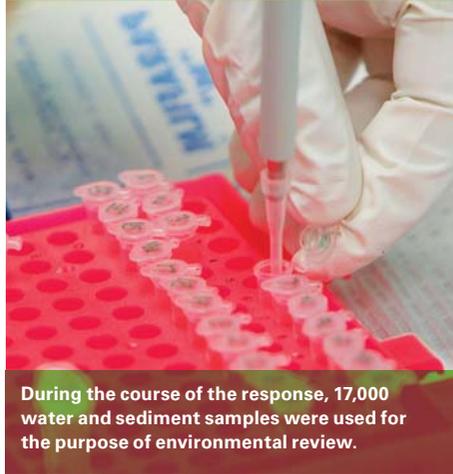
**1,246 birds, 397 sea turtles, three mammals and more than 14,000 sea turtle hatchlings cared for and released, as of 31 December 2010, according to the US Fish and Wildlife Service.**



**Four bird-rehabilitation centers, three bird stabilization centers and seven marine mammal and sea turtle rehabilitation centers were set up along the coast.**

## Our commitment to the Gulf of Mexico region

We established the Gulf Coast Restoration Organization, whose mission is to fulfil BP's environmental, social and economic commitments in the Gulf Coast over the long term



### Establishing baseline data

BP awarded grants totalling \$40 million to Louisiana State University, the Northern Gulf Institute, the Florida Institute of Oceanography, the Alabama Marine Environmental Sciences Consortium and the National Institutes of Health to enable and support sampling during the incident and high-priority studies of the distribution, composition and ecological interactions of oil and dispersants. These studies, included as part of the Gulf of Mexico Research Initiative, will help establish baseline data as the foundation for subsequent research.

The Gulf Coast Restoration Organization, with offices in each of the impacted Gulf states, enables us to take a local approach to operations, environmental restoration, community and governmental relations, and financial management. We are committed, in collaboration with our partners and industry peers, to delivering safe operations in the Gulf of Mexico.

### Monitoring health and environmental impacts

In co-operation with the Unified Area Command, BP implemented a comprehensive environmental testing and monitoring programme to help guide oil recovery and clean-up efforts, and to assist in understanding any potential health and environmental impacts of the Deepwater Horizon accident. BP, the US Coast Guard, the EPA and other government agencies tested numerous samples of water and sediments for oil and dispersant, and implemented a comprehensive air-quality sampling and monitoring programme.

More than 16,000 air samples were taken during the response; EPA found pollution levels well below levels of concern for long-term health effects related to the spill. Seventeen thousand water and sediment samples were used for the purpose of environmental review. None of the water samples exceeded EPA benchmarks for human health or exceeded aquatic life standards for specific dispersant chemicals.

Longer term, the National Institutes of Health is conducting a multi-year study to look at the potential health effects from the oil spill, with particular focus on worker exposure to oil and dispersant products and the potential physical and mental health consequences.

### Natural Resource Damage Assessment

The Natural Resource Damage Assessment (NRDA) is a process, in which state, tribal and federal government agencies identify the nature and extent of potential injuries to natural resources resulting from an oil spill or hazardous substance release.

BP is working with scientists and trustee agencies through the NRDA process to identify wildlife and habitats that may have been exposed to oil or dispersants, and to look for evidence of injury. In addition, experts for BP and the trustee agencies are looking at how recreational uses of the Gulf have been affected so that lost opportunities to enjoy those activities can be addressed through restoration.

The process of gathering data for assessment is expected to continue in 2011. In parallel, scientists and other experts will work with the federal and state trustees to develop emergency and early restoration plans, implement them quickly, and then monitor the work to make sure they are successful. Final restoration plans will be developed when the injury assessments are complete.

We are implementing a waterfowl habitat creation programme in Mississippi. An emergency restoration plan to prevent or minimize erosion along sensitive shorelines and sea grass restoration and planting are also under consideration.

### Gulf of Mexico Research Initiative – \$500-million programme

Committed to understanding the long-term impacts of the Deepwater Horizon accident, BP has set up the \$500-million Gulf of Mexico Research Initiative to study and monitor the effects of the oil spill and its potential impacts on the environment and human health.

This 10-year programme seeks to engage and utilize the expertise of some of the world's best research scientists to address issues that are of regional concern, such as the spread of the oil and other contaminants and what ultimately happened to them; the environmental effects of the oil spill on ecosystems; and the potential impact of the oil spill and response on human health.

To implement the Gulf of Mexico Research Initiative, BP has entered into an agreement with the Gulf of Mexico Alliance, comprised of the five Gulf Coast states. BP and the Alliance have appointed scientists with peer-recognized credentials to an independent advisory council to review funding requests and provide research grants. All Gulf of Mexico Research Initiative-funded research will be conducted independently of BP.



At the peak of the spill, about 37% of federal Gulf waters were closed for fishing. By 31 December 2010, 98% of waters were open.

## Restoring the Gulf economy

BP is working to foster economic restoration throughout the Gulf Coast, with special emphasis on two of the region's most impacted industries: tourism and seafood. Additionally, BP funded a charitable trust to recognize the financial hardship of rig workers unemployed during the US government's moratorium on deepwater drilling.

### Tourism

Throughout the Gulf Coast, we are providing financial support for state tourism promotion efforts. Within weeks of the accident, we had announced block grants of \$70 million to help promote tourism and mitigate the economic impact of the oil spill in Louisiana, Mississippi, Alabama and Florida. In the autumn of 2010, we further increased our support for tourism in the region by committing an additional \$47 million in total to the four states affected.

Each state is using the tourism funds to develop specific marketing programmes that promote their state's key tourism selling points.

### Seafood industry

We are also working with officials in the region to design programmes to test and monitor the safety of seafood and to promote Gulf seafood along the coast and around the country. In Louisiana, for example, BP is providing \$18 million over a three-year period for testing of oil, dispersants and other spill-related impacts on seafood, and is funding a three-year, \$13-million fishery-resource monitoring plan to study the effects of the oil spill on the state's fisheries resources.

## Commitment to seafood safety

The safety of seafood from the Gulf of Mexico is a priority for BP, the US government and each of the affected states along the Gulf Coast. At its peak in June, about 37%, or 88,522 square miles, of federal Gulf waters were closed by NOAA for commercial and recreational fishing; by 31 December, all but 1.2% of these waters were open. In some locations, state waters were also closed to fishing, to protect the public from exposure to potentially contaminated seafood.

To help boost consumer confidence in the safety of seafood being harvested from the Gulf, NOAA and FDA also test for evidence of dispersants. Trace amounts, found in less than 1% of the samples taken, have been far below any level of health concern. BP will continue to fund seafood-testing programmes in Florida and Louisiana through 2013, and is in discussion with Alabama and Mississippi about doing the same.

## Working with our peers

The lessons we learned throughout the response have wide applicability across the industry, and it is BP's hope that our experiences can be used to improve the response to any potential future marine oil spill, anywhere. We are committed to working with the industry and governments to share lessons learned, as well as the new equipment and technology developed in response to this accident.

In the Gulf of Mexico, BP has joined the Marine Well Containment Company (MWCC), an initiative with ExxonMobil, Shell, ConocoPhillips and Chevron designed to quickly deploy effective equipment in the event of another underwater blowout. The well containment equipment used in the Deepwater Horizon response will preserve existing capability for use in the Gulf of Mexico while the MWCC builds a system that exceeds current response capabilities.

Our newly-formed Global Deepwater Response Team is charged with sharing the insights and experience gained from the incident with BP staff involved in other deepwater projects, as well as with partner companies, regulators and others in various countries where we have offshore operations. We are also participating in the International Association of Oil and Gas Producers' Global Incident Response Group, which works to facilitate the application of the lessons globally within the industry, focusing on prevention, intervention and response aspects.

# How we operate

BP is making changes to how we manage our operations – strengthening our governance, safety culture and relationships with contractors and stakeholders

 **How we operate**  
[bp.com/howweoperate](http://bp.com/howweoperate)

## Managing operational risk

We are taking steps to strengthen risk management in our operations – in relation to our own actions and those of suppliers and partners

Page 16



## Our values and code of conduct

We are renewing our commitment to BP's values and continuing to hold our workforce accountable to our code of conduct

Page 18



## Engaging stakeholders

How we engage with key stakeholder groups, and how these interactions can strengthen BP as a group

Page 20



# Corporate governance and risk management

Our governance framework includes the principles that guide our board and management team, as well as a system of controls that defines how we work

## The board

The board is responsible for the direction and oversight of BP p.l.c. on behalf of shareholders; it is accountable to them, as owners, for all aspects of BP's business. It focuses its activities on strategy development, the oversight of risk and monitoring the performance of the business.

The board sets the tone from the top, and has established a set of board governance principles, which delegate management authority to the group chief executive within defined limits. These include a requirement that the group chief executive will not engage in any activity without regard to health, safety and environmental consequence.

The board reviews key group risks and how they are managed as part of its agendas.

On 1 January 2011, the board was composed of the chairman, three executive directors and 11 non-executive directors.

### Board committees

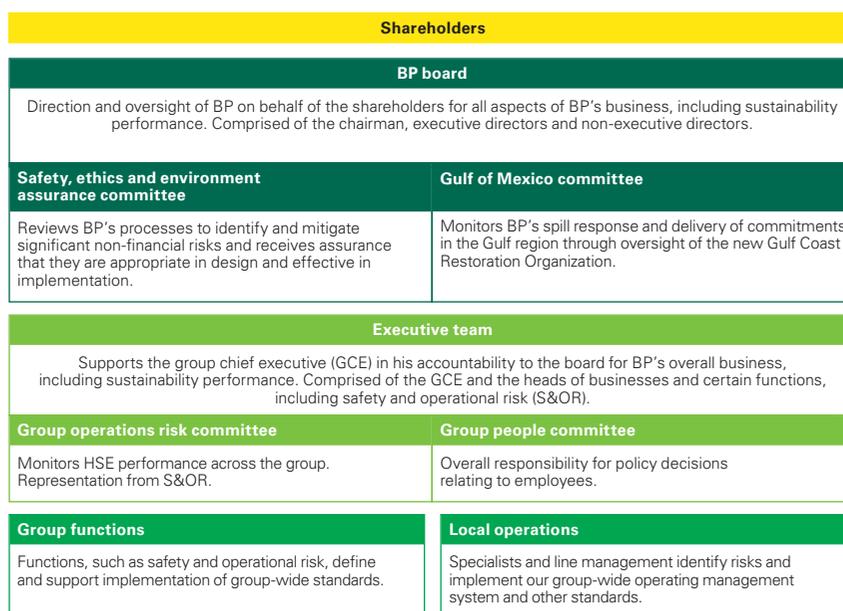
The board delegates some of its oversight and monitoring activities to its committees, composed entirely of non-executives. The chair of each committee provides updates on committee activities to the wider board.

One of the five permanent committees – the safety, ethics and environment assurance committee (SEEAC) – monitors the management of non-financial risk, which includes regular reviews of information and reports from executive risk committees, such as our group operations risk committee, as well as from the safety and operational risk function and other parts of the business. SEEAC is monitoring BP's global implementation of the measures recommended in BP's investigation after the Deepwater Horizon accident.

### External information and advice

The board and its committees also receive information from external sources, as needed. For example, the board and SEEAC work with the Independent Expert to review the progress made in implementing the recommendations of the BP US Refineries Independent Safety Review Panel. An international advisory board advises the chairman, group chief executive and board of BP p.l.c. on strategic and geopolitical issues relating to the long-term development of the company.

## BP's management of sustainability risks and issues



### Board activities in 2010

The Deepwater Horizon accident dominated the focus and work of the board. Non-executive members of our board, including the chairman and the chair of SEEAC, visited the Gulf of Mexico during this period.

During 2010, the board appointed four new non-executive directors, who together bring deep experience in the oil and gas industry, global strategy, accounting and audit, and the management and monitoring of organizational safety.

In July, the board established the Gulf of Mexico committee to monitor BP's response to the Deepwater Horizon accident through oversight of the new Gulf Coast Restoration Organization. The committee oversees BP's activities and responsibilities with respect to the Gulf Coast Claims Facility, the \$20-billion trust, remediation work, community outreach, and response to fines and penalties.

### Our system of internal control

BP uses a comprehensive set of management systems, organizational structures, processes, standards and behaviours to conduct our business and deliver returns for shareholders. The board is responsible for maintaining a sound system of internal control, and delegates the establishment and maintenance of this system to the group chief executive.

Everyone who works for BP needs to meet the aspects of the system relevant to them in what they do. It is the job of leaders to ensure that aspects of the system relevant to their team are understood and followed in such a way that risks are managed appropriately at all levels in BP.

### Risk management

Our businesses identify, prioritize, manage, monitor and improve the management of risks on a day-to-day basis to equip them to deal with hazards and uncertainties. We report the key risks, and how they are managed, up through the line in a consistent manner to assist with business planning, appropriate intervention and knowledge sharing.

The board reviews material risks to the group and their recognition in the company's annual plan. The board committees review the reporting by business and function which includes the safety and environmental performance of projects.

We are examining what can be learnt from our experiences in 2010 to further improve BP's risk processes.

# Managing operational risk We are taking steps to strengthen risk management in our operations – in relation to our own actions and those of suppliers and partners

## Dedicated safety and operational risk function

After the Deepwater Horizon accident, BP redefined and strengthened the scope and accountabilities of the group function for safety and operations.

The core responsibilities of the new, independent safety and operational risk (S&OR) function are to:

- Provide checks and balances independent of the business line.
- Strengthen mandatory safety-related standards and processes, including operational risk management.
- Provide an independent view on operational risk.
- Assess and enhance the competency and capability of our workforce in matters related to safety and operations.

We are deploying S&OR professionals, many of whom were previously reporting to local business leaders, in all of BP's operations throughout 2011. The head of S&OR is a member of BP's most senior executive team, along with the heads of the businesses and certain functions.

S&OR oversees and audits the company's operations around the world, assuring that operations are carried out in line with the group's operating management system (OMS). While the business line continues to be accountable for operational delivery, S&OR holds the authority to intervene in all safety and operational risk aspects of BP's technical and operational activities.

## Our operating management system

Our OMS provides a group-wide framework to drive a rigorous and systematic approach to safety, risk management and operational integrity across the company. Launched in 2008, the OMS integrates requirements regarding health, personal and process safety, security, environmental and operational reliability, as well as related issues, such as maintenance, contractor relations and organizational learning, into a common system.

### The right foundations

BP firmly believes that the OMS provides us with the right foundations to achieve operational excellence. The ethos and structure of the OMS provide us with the rigour, discipline and aspiration we need to achieve operations that are reliable, compliant, and, above all other considerations, safe. This is a long journey and fully embedding it across the group will take a number of years.

BP continues to evolve the OMS by incorporating learnings from implementation experience, incident investigations, audits, and risk assessments, and by strengthening mandatory practices.

The OMS principles and standards are supported by detailed company practices, as well as other technical guidance materials. OMS requires that certain standards, group-defined practices and group engineering technical practices be implemented company-wide. These include, among others, assessment, prioritization and management

of risk; incident investigation; integrity management; and environmental and social requirements for certain types of projects.

### Transitioning to OMS

Implementation of the OMS at the local level is at the heart of our delivering safe and responsible operations. The transition to OMS requires each operation to develop a local OMS (LOMS), which describes how the operation addresses site-specific local operating risks to meet group standards and practices while focusing on their specific activities. As an essential step in developing its LOMS, the business unit conducts an assessment of the gaps between the standards and practices contained in OMS and local processes and procedures, and then develops a gap-closure plan. After this initial gap assessment, each operation conducts an annual assessment to identify the additional steps to be taken to improve performance. Training and assurance processes support effective implementation.

To formally transition to OMS, an operation issues a handbook for the workforce to follow, completes a management-of-change document that details the changes involved, and obtains formal sign-off by the segment operating authority and business unit leader.

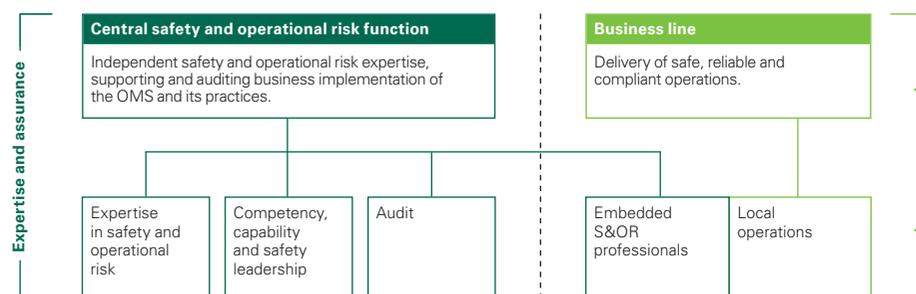
All of BP's major operations have transitioned to OMS. BP operations are now working to close any gaps identified in their original assessments; this can be a multi-year process.

### OMS and the Gulf of Mexico oil spill

The Gulf of Mexico operations were covered by the OMS at the time of the Deepwater Horizon accident, having completed their transition to OMS in December 2009. As with other BP businesses, the Gulf of Mexico operations are in the process of reinforcing OMS practices, and working to close identified gaps to achieve full conformance.

BP will incorporate lessons learned from the Deepwater Horizon accident into OMS, including around contractor management and oil spill preparedness and response.

## Deploying S&OR professionals in local operations in 2011



## Working with suppliers and partners

In the global energy industry, major projects almost always require the financial and technical collaboration of multiple companies, often including a mix of multiple business partners and suppliers, with the support of both employees and specialist contractors. Like its oil and gas company peers, BP rarely works in isolation.

This means our ability to fulfil our corporate responsibility aspirations depends in part on the conduct of our suppliers, contractors and partners. We address this in a variety of ways, from training and dialogue to confirming operational standards through legally binding agreements.

We expect our suppliers, contractors and partners to comply with legal requirements and operate consistently with the principles of our code of conduct when working on our behalf.

### How our standards apply to suppliers and contractors

Our processes are designed to ensure that we choose suppliers carefully, on merit, avoiding conflicts of interest and inappropriate gifts or entertainment.

BP employees who engage suppliers or individual contractors to work on behalf of BP are required to brief them on the contents of the code of conduct and seek their co-operation in adhering to the code – including, where possible, through a contractual requirement to act consistently with the code when working on our behalf. We investigate suspected cases of non-adherence and terminate contracts when a serious breach is found to have occurred.

In 2010, BP terminated or did not renew 14 suppliers' contracts, due to non-compliance or unethical behaviour, mainly conflicts of interest, fraud or property theft. This compares with 30 contracts terminated in 2009 and 22 in 2008.

### Reviewing our oversight of contractors

We began a review of the way we work with contractors for all onshore and offshore rig activities in 2010 with a particular emphasis on managing safety and operational risk. We are looking at the approaches and processes we use to promote safe and compliant delivery from contractors, especially in cases where the risks associated with the work they do can be characterized as high consequence and low probability. What we learn from this review will

inform our overall approach to contractor management throughout the group.

We are striving to build deep working relationships with our contractors and to support these relationships with robust contracts that clearly define mutually agreed requirements, standards and assurance processes.

### Our relationships with business partners

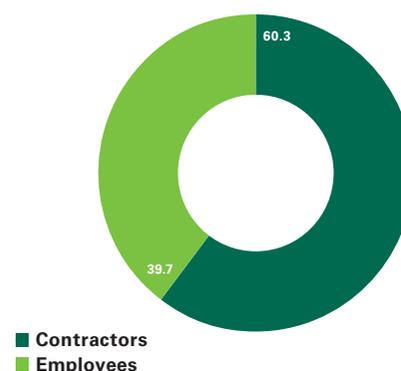
We seek to work in partnership with companies that share our commitment to ethical and sustainable working practices. It is important to note, however, that in some of the joint operations in which BP is involved, we do not control how our partners and their employees approach these issues.

Typically, our level of influence or control over a project is linked to the size of our financial stake compared to other participants. In some joint operations, we hold a majority stake and act as the project's operator. In most cases where we are the operator of a project, our policies, standards and operating systems apply.

In other cases, we are not the day-to-day operator and may hold an equal or minority stake, with one or more other partners holding the majority stake. We generally consider whether the management system used by the operator provides similar levels of risk and performance management to our own. We seek to influence our partners through dialogue and constructive engagement.

## Contractors as part of BP workforce

(% hours worked)



### Ernst & Young observation

BP has included increased coverage of emerging sustainability issues, in particular influencing the working practices of third parties. BP's internal investigation into the Deepwater Horizon incident and the Presidential Commission both stress the importance of strong contractor oversight. BP's safety reporting shows the importance of the issue – more than 60% of the hours worked within its operations were undertaken by contractors. We discussed BP's commitment to reviewing the way it works with contractors. It will need to highlight any changes made in future reporting.

## Our environmental and social practices

BP's processes and systems for identifying and appropriately managing environmental and social impacts and risks of certain types of projects, including major projects, are now integrated into our operating management system (OMS).

The practices include actions we require projects to undertake together with a series of recommended practices that might be relevant depending on the type of project. Launched in 2010, they provide a consistent methodology to help projects deliver the intent of the relevant sections of the OMS and the BP code of conduct in regard to environmental and social issues. We are carrying out training across the group to help our personnel apply them effectively and appropriately.

### Environmental

- Air quality
- Drilling wastes and discharges
- Greenhouse gas and energy management
- Marine mammals
- Ozone-depleting substances
- Physical and ecological impacts
- Prevention of soil and groundwater pollution
- Water management
- Waste management

### Social

- Community disturbance
- Community engagement
- Community investment
- Impact assessment
- Indigenous people
- International protected areas
- Moving communities
- Security and human rights
- Workforce welfare and local employment

# Our values and code of conduct

Our values and code of conduct define the behaviours that are expected of everyone who works for BP

## Renewing awareness of BP's values

Our values are there to guide us in everything we do, and the events of 2010 renewed our focus on the need for a shared understanding of what we believe, how we behave and what we aspire to do as a company. Our experience especially highlighted the importance of long-term thinking, collaboration across teams and the humility to learn lessons and listen to others.

With these aims in mind, we are reviewing the way we express BP's values and the content of our leadership framework with a goal of ensuring they support our aspirations for the future, align explicitly with our code of conduct and translate into responsible behaviours in the work we do every day. We expect to carry out a programme to renew employee and contractor awareness of our values and the behaviours everyone in BP needs to exhibit as we work to reset our priorities as a company.

## Our code of conduct

BP's code of conduct sets out standards of behaviour for our employees, contractors and suppliers. With clear and concise rules on topics such as safety, child labour, workplace harassment and political activity, it is designed to help them do the right thing in a complex business environment.

We periodically review the code to ensure it continues to represent best practice as a governance document and to provide effective guidance on the risk areas BP faces as a business. We deferred the update of the code planned for 2010 so that the proposed changes could be aligned with a strategic review of BP's values and commitments after the appointment of a new group chief executive. We expect to release our refreshed code of conduct to our workforce in 2011.

## Speaking up

We encourage employees to speak up and voice their concerns. We are committed to providing our employees and contractors with a working environment in which they are unafraid to speak up about behaviours that could be in breach of our code of conduct or the law.



Workers in Tangguh, Indonesia

We expect everyone who works for BP to ask questions or report any concerns they have about risky or unethical behaviours among our employees, contractors and business partners.

Anyone who in good faith seeks advice, raises a concern or reports misconduct is following our code of conduct. BP will not tolerate retaliation against that individual. Retaliation claims are taken seriously, investigated and appropriate action is taken if retaliation is proven.

In 2010, 742 cases were raised through OpenTalk, with the most common issues relating to employment matters.

## Enforcing code of conduct compliance

In 2010, our businesses reported 552 dismissals for non-compliance or unethical behaviour, compared with the previous year's 524 dismissals. This excludes dismissals of staff employed at our retail service station sites, for incidents such as thefts of small amounts of money. Violations of health, safety, security or environmental requirements accounted for over 40% of these dismissals, reflecting our emphasis on holding people accountable for safe operating.

In 2010, BP terminated or did not renew 14 suppliers' contracts, compared with 30 contracts terminated in 2009 and 22 in 2008.

## Code of conduct

### Health, safety, security and environment

Rules for a safe and secure workplace and a responsible environmental impact

### Employees

Expectations for employee behaviour, from respectful treatment of co-workers to our policy on child and forced labour

### Business partners

Guidelines on the giving and receiving of gifts, how to avoid conflicts of interest and other topics

### Governments and communities

How we interact with governments and communities, from preventing bribery and corruption to our policy on political activity

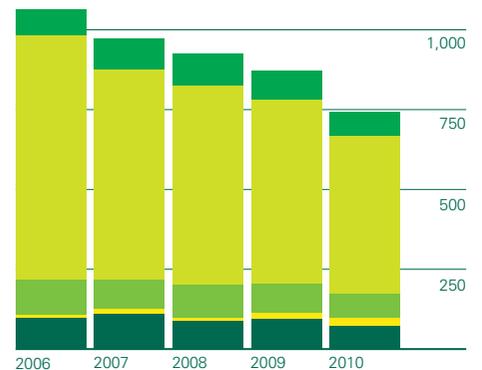
### Company assets and financial integrity

Guidance on how to protect the physical, intellectual property and financial assets of BP

## OpenTalk cases

(by code chapter)

Health, safety, security and environment	1,500
Employees	
Business partners	
Governments and communities	
Company assets and financial integrity	1,250



**Simon Webley**  
Research Director,  
Institute of Business  
Ethics

The fact that 552 employees were dismissed in 2010 for breaches of the BP code of conduct and 14 contracts were terminated shows that first, the code is taken seriously by BP management and second, that a significant number of employees did not think it important enough to implement. There is clearly work to be done in continuing to raise awareness and provide meaningful training.

 **Our code of conduct**  
[bp.com/codeofconduct](http://bp.com/codeofconduct)

## Our employees BP's sustainability as a company depends on the skills, commitment and behaviours of our employees in every country where we operate

### How we manage workplace goals

Strengthening safety, compliance and risk management across the group depends on the actions our people take daily in their roles.

Ultimately, the group chief executive and BP's executive team have responsibility for setting policy relating to our 79,700 employees working in more than 70 countries. They do this through the group people committee, which meets regularly to review policy decisions relating to employees. In 2010, the committee's agenda included senior-level talent reviews and succession planning, new hire and promotion assessments, leadership training, and reward strategy, including the structure and operation of incentive programmes.

We are reviewing how we incentivize business performance. For example, in light of the Deepwater Horizon accident, we are introducing a refreshed performance management and reward strategy that further strengthens the focus on safety within performance reviews to encourage excellence in safety and operational risk management.

### Sustainable workforce

The energy industry is facing a growing skills gap, and BP is addressing this issue in several ways. We are reaching out to students, in the hope of inspiring more young people to choose a career in the energy industry. We have refined our recruitment programmes with a greater emphasis on hiring people with sought-after technical and specialist skills, especially those who are at the start of their working lives and, therefore, can grow and contribute over many years in the industry.

We are also expanding the technical skills of our employees through training and development. For example, we have put in place 10-year career development plans for each of our petro-technical disciplines. Each plan identifies the training, job experiences and assessments that employees will need over the short and long term. More than 21,000 participants in 42 countries have now taken part in our group-wide suite of management development programmes, Managing Essentials, since it launched in 2007.

We aim to treat employees affected by mergers, acquisitions and joint ventures fairly and with respect, through open and regular communication. As part of the divestment programme following the Deepwater Horizon incident, BP has been seeking the same or comparable pay and benefits for employees transferring to other companies.

### Diversity and inclusion

At BP, workplace inclusion means making sure we have a meritocracy where people succeed based on their skills and capabilities. It is about building a workforce that looks and feels like part of the societies and communities in which we operate.

All businesses are required to develop an action plan based on analysis of the diversity and inclusion (D&I) issues most relevant for their particular area of responsibility. Some of the areas covered in recent D&I plans include providing the right conditions for all employees (regardless of gender) to advance into senior positions, safeguarding and promoting the rights of all minorities, and building the pipeline of local national talent. Delivery of the plan is part of segment leaders' performance contracts.

We are training 6,000 senior BP leaders in D&I principles through a training module called Owning Our Diversity Agenda. Participants confront situations that challenge their notions of what it means to be diverse and inclusive. In 2010, we trained about 3,000 BP leaders in the US and UK, and we expect to train all group-level and senior-level leaders around the world by the end of 2011.

### No tolerance for inappropriate behaviour

BP has a clear no-tolerance policy in relation to abusive behaviours. Our code of conduct explains behaviours we expect from our employees, including rules intended to prevent any form of harassment or abuse.

Our leaders in the US have taken decisive action in response to some instances of offensive graffiti and other reported acts of intolerance at our operational facilities. A task force was set up in 2010 to develop proposals on the prevention of further incidents, working with national organizations, such as the Center for Prevention of Hate Violence. The BP America board reviewed the task force's recommendations, and work is under way to take them forward.

Other actions included requiring contractors at BP refineries in the US to formally commit to the rules set out in our code of conduct, training in the code of conduct for around 2,000 refinery contractors, and the pilot of a new Respect at Work training module for managers at two BP refineries.

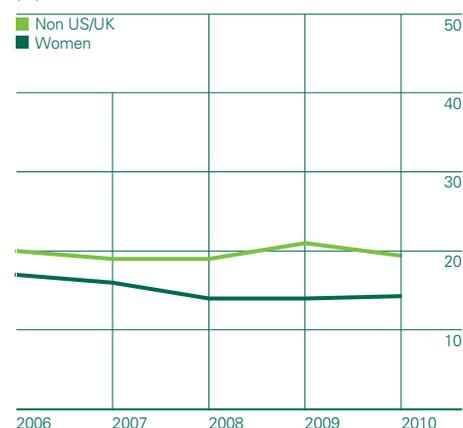
### Women in BP

(% at each organizational level)



### Diversity in group leadership

(%)



**Our employees**  
[bp.com/employees](http://bp.com/employees)

## Stakeholder engagement Constructive dialogue with stakeholders helps BP to make responsible and sustainable decisions



Talking with community leaders in Pensacola, Florida, US

We talk with stakeholders in many ways and at many levels, from the queries that reach us via our website to face-to-face meetings with investors, governments and regulators, customers, employees, community groups and others.

We are setting up an independent advisory group to provide external advice and challenge on environmental and sustainable development issues, taking into consideration their linkage to BP's strategy and activities.

### Local communities

Engaging with local communities is a vital element of our work. As our code of conduct says, our aim is that the communities where we operate 'properly benefit from our presence'. Talking with local people and other stakeholders helps us to define what this means for each operation. It also helps us more fully understand the potential environmental and social impacts of what we do.

In Alaska, for example, a designated staff member facilitates engagement between company staff, communities and other stakeholder groups on the North Slope, and runs a variety of activities during the year. Many questions are addressed through operational updates to local government which are sometimes broadcast on local radio. We also publish a newsletter for local households.

### Shareholders and analysts

We recognize a responsibility to keep our shareholders and the investment community informed about our progress as a group,

including providing opportunities for regular dialogue and feedback. Our engagement in this area is well developed and follows our commitment to go beyond our statutory requirements as a listed company.

For example, after the Deepwater Horizon accident in 2010, our communications strategy was to be as transparent as possible and keep the information flow constant. We made regular announcements to the market. We kept our shareholders and analysts informed through meetings with senior executives, including the chairman and the group chief executive.

BP has a dedicated area on its website, [www.bp.com/sri](http://www.bp.com/sri), where we respond to sustainability-related queries from our investors.

### Governments and regulators

BP engages with governments on many fronts, from consulting on environmental and social impact studies to understanding our tax liabilities and collaborating on community or entrepreneurial initiatives. In some places, we work in partnership with governments through production-sharing contracts.

We also engage directly with governments in the US, Europe and elsewhere on issues that we believe are essential to the energy future. We seek to do this engagement in an open and transparent way. For example, BP was the first oil and gas company to register under the European Commission's voluntary lobbying register and code of conduct.

### Engagement after the Deepwater Horizon accident

We engaged with stakeholders in many different ways in the months after the Gulf of Mexico incident. In addition to our efforts to communicate with the affected Gulf Coast communities and listen to and address their concerns, we met with government officials, NGOs and investors, queried our customers' views via interviews and other research, and consulted with companies in our industry for technological collaboration and advice. We recognize the value and importance of continuing to engage with these stakeholders.



**Judy Kuszewski**  
Corporate sustainability expert

One thing that seems apparent is that stakeholder engagement fell off in recent years, and BP has had a massive need to re-establish it in the last months. Open engagement is essential to rebuilding trust.

### What stakeholders have been telling us

Many stakeholders – from non-governmental organizations (NGOs) to investors, from governments to community leaders – expressed their concerns with BP in 2010. They urged BP, among other things, to:

- Involve NGOs in the Gulf of Mexico restoration efforts.
- Play a positive role in the development of new industry deepwater regulations.
- Clarify how its internal carbon pricing helps to address the issue of GHG reductions.
- Clarify why it exited the US Climate Action Partnership.
- Explain its public lobbying activities.
- Be factual and transparent in its social and environmental reporting.
- Provide a clear roadmap on its approach to the energy future.



**Stakeholders**  
[bp.com/stakeholders](http://bp.com/stakeholders)

**Human rights** We recognize that our operations can impact people and communities in ways that relate to human rights. BP categorizes the issues into three broad headings: employees, communities and security

We have taken steps to incorporate respect for human rights into our management practices and governance. For example, our code of conduct describes our commitment to fair employment and equal employment opportunity and to conducting open and transparent dialogue with communities. Our operating management system includes practices for our major projects on rights-related topics, such as security arrangements for our sites and engagement with indigenous peoples.

### Employees

BP understands that with the employment of almost 80,000 employees, as well as an extensive contractor workforce, comes the responsibility to be vigilant in relation to potential labour rights issues, including forced labour, child labour, the right to non-discrimination, and the rights of the workforce to collective bargaining.

Our guidelines for managers and employees on these issues follow guidance from the UN Global Compact, industry practice, BP's own experience, and national and international law.

Our code of conduct and group human resources policies include clear rules for BP managers in relation to equal opportunities. For example, managers are required to make sure their decisions regarding recruitment selection, development and advancement of employees are based on merit rather than factors such as race, colour, religion, gender, age, national origin, sexual orientation, gender identity, marital status or disability.

### Communities

Our presence can have a significant impact on communities in which we operate, including affecting the livelihoods of local residents. For this reason, we require certain new projects to consider community impacts in their early screening for social and environmental impacts and to further examine this issue in the detailed impact assessments they carry out before any work begins.

We recognize that the Gulf of Mexico oil spill affected the livelihoods and local business sectors in Gulf Coast communities. Having worked among these communities for many years, we understood the economic impacts of the oil spill. We have made investments to help the region recover and have committed to meet all legitimate claims from individuals and businesses.

### Security

BP is committed to protecting our people and facilities in a manner that upholds respect for human rights. BP worked with other companies from our industry, as well as NGOs and the US and UK governments, to develop the Voluntary Principles on Security and Human Rights.

We use the Voluntary Principles as a framework for assessing whether human rights issues are likely to arise in relation to our security arrangements in a country and ensuring that appropriate precautionary steps are taken.

In some locations, BP relies on private security service providers, public security organizations or a combination of the two to protect our employees and facilities. We have developed a set of standard contractual clauses to help ensure our private security providers act consistently with the Voluntary Principles. We have supported Voluntary Principles-related training courses for both private and public security, covering human rights law and practical instruction on relevant topics.

For example, in 2010 we commissioned an external assessment of our security arrangements in Iraq and we started an initiative to inform local communities around our LNG facilities in Tangguh, Indonesia, about the security arrangements there.



Security checks on a vehicle in Colombia

### BP and the UN Framework for Business and Human Rights

BP has participated in discussions about the development of a new human rights framework led by Professor John Ruggie, the UN Secretary General's special representative for business and human rights. The framework, which the UN Human Rights Council unanimously welcomed and the international community accepted, outlines specific responsibilities for businesses in relation to human rights. It is accompanied by recommendations on due diligence, including the formal integration of human rights into businesses' governance systems.

The framework and the due diligence recommendations are likely to be influential, thus increasing scrutiny on and expectations of business. Companies will be encouraged to be more transparent and to report on human rights impacts and mitigation actions of projects and operations. National legislation based on this framework may be enacted in the future, both in OECD and in non-OECD countries.

# Energy future

Today's challenge is meeting the growing demand for secure, affordable energy to enable economies to prosper – while addressing the issue of climate change

 **Energy future**  
[bp.com/energyfuture](http://bp.com/energyfuture)

## Meeting the energy challenge

We believe energy efficiency and existing lower-carbon fuels can play important roles in addressing the key challenges

Page 24



## Climate change

As international and national debate unfolds, we describe our priorities and actions on climate change

Page 26



## Alternative energy

We're focusing on building low-carbon businesses that are aligned with BP's core capabilities and can provide a material source of low-carbon energy

Page 28

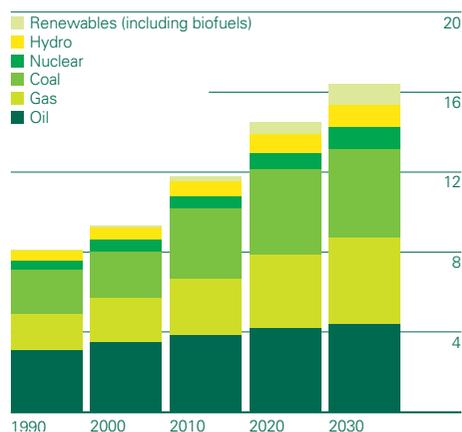


## The energy challenge

With energy demand projected to keep going up, the global energy challenge is getting increasingly complex

### Global energy demand by type

(billion tonnes of oil equivalent)



Source: BP Energy Outlook 2030

The energy challenge facing policymakers and our industry is how to fuel the global economy in an era of unprecedented growth, while reducing the amount of carbon dioxide and other greenhouse gases being emitted.

This challenge is global and complex, involving many difficult energy decisions. It links geopolitical concerns with environmental trends and the energy needs and aspirations of ordinary people, everywhere. Energy security is a major challenge in its own right, as more than half of the world's natural gas is located in just three countries, and some 80% of global oil reserves are located in 10 countries, most of which are located well away from the hubs of energy consumption.

Energy options that make sense economically or politically may carry environmental drawbacks, and vice versa. Some of the lowest-carbon sources of power, such as hydrogen power with carbon capture and storage, are among the most expensive to produce.

### Facing further growth in energy demand

Meanwhile, the world's overall need for energy continues to go up. Global demand for energy has risen steadily for the past several decades, and this trend appears set to continue. One reason is population growth, especially in the developing world. Another factor is economic. Most of the growth in future energy demand is projected to come from developing countries where using more energy is a sign of rising living standards and welcome economic growth.

BP Energy Outlook 2030 projects that global energy demand could increase by around 40% in the next two decades, assuming continued tightening of energy policies aimed at restraining growth in demand and curbing CO<sub>2</sub> emissions. Demand could rise by around 30% even if more aggressive policy measures are introduced.

### Meeting the demand

We estimate that there are enough energy resources available to meet this increase in demand. As a measure of this availability, today's oil reserves would meet 45 years of demand at current consumption rates, while known supplies of natural gas would last more than 60 years and coal for up to 120 years at today's consumption rates.

On top of this, new technologies are making unconventional fossil resources such as shale gas, oil sands and coalbed methane more available and more economically attractive. And emerging renewable resources, such as biofuels, wind and solar power, have the potential for significant contributions as well, as their markets mature and technological advances make them more affordable and efficient.

So the question is not only whether the expected rise in energy demand can be met, but also whether this demand can be met sustainably, which mix of energy sources is the optimal one, and whether there may also be ways to reduce demand without damaging the world economy.



**Energy Outlook 2030**  
[bp.com/energyoutlook2030](http://bp.com/energyoutlook2030)



Thunder Horse platform, Gulf of Mexico

### Deepwater drilling of oil and gas

We recognize that the Deepwater Horizon accident has raised questions about finding and producing oil and gas in deepwater environments. We are working with governments, regulators and our industry so that the lessons learned from the accident are not forgotten and become part of industry best practice.

We believe any future industry-wide governing principles or framework for deepwater drilling should include shared capacity for response to incidents, should they occur; consistent policies and equipment, wherever possible; and active engagement with regulators and other relevant government officials.

In addition to any new governmental oversight mechanisms and processes that may be introduced, we believe our industry should focus on contingency planning and response capability; overall reliability of well design and construction; operational capability and competence; and financial capability.

Deepwater resources are an important part of the energy mix, especially in the US, where offshore production in the Gulf of Mexico has reversed a 23-year trend of declining domestic oil production. Globally, deepwater resources account for around 7% of global oil production, a figure that we expect to rise to nearly 10% by 2020. BP has deepwater assets in Angola, Australia, India, Libya, the North Sea and the Gulf of Mexico in the US.

## Meeting the energy challenge

We believe increasing energy efficiency and greater use of existing lower-carbon fuels can make a fast and material impact

### Saving energy through efficiency

Increases in efficiency have the potential to reduce the overall amounts of energy used and hence the carbon that is emitted globally, without inhibiting economic growth.

Efficiency can be increased in many different ways, such as through improvements in vehicle and appliance technology and through programmes that encourage or require people to be more conscious of their energy use. Often, these gains can be achieved at relatively low cost or even a net savings overall.

In transport, efficiency efforts could have an especially big impact. We believe that advanced biofuels combined with several promising vehicle, combustion engine and power-train technologies, including hybridization, offer the quickest and most effective pathway to a secure, lower-carbon future, at least in the short to mid term. For passenger cars, the potential carbon savings from efficiency measures like these could equal those that are possible through the widespread adoption of electric vehicles powered by a gas-fired electricity grid – and could be achieved more quickly, at less cost, on a larger scale and using the existing fuel distribution infrastructure.

### Maintaining a diverse energy mix

We believe the energy challenge can only be met through a broad and diverse mix of fuels and technologies. That is why BP's portfolio includes conventional oil and gas as well as oil sands, shale gas, deepwater production and alternative energies.

At a fundamental level, we believe the most effective means of finding, producing and distributing diverse forms of energy is to foster the use of open, competitive markets. This should include secure access for exploration and development of resources, with defined mutual benefits for resource owners and development partners, and an appropriate legal and regulatory environment.



Shanghai, China

Within the energy mix, we see a key strategic role for natural gas as it is a lower-carbon fuel that is increasingly secure and affordable. It is the fossil fuel that releases the least carbon dioxide when burned and, when used to create electricity, it produces about half the emissions caused by conventional coal generation, per kilowatt hour. New technologies are making it possible to reach gas in complex rock formations that were previously out of reach, which means that natural gas is more widely available than it was a few years ago. As a result, gas has become more affordable relative to other fuels in key markets, while pipeline infrastructure has been improved and new facilities to produce and import liquefied natural gas have been built.

### Why not focus exclusively on renewables?

By our estimates, emerging renewable resources like biofuels, wind and solar will meet around 6% of total global energy demand by 2030. Over the longer term, we believe that they will play an essential role in addressing the challenge of climate change, as well as offering important energy security benefits.

However, renewable, low-carbon energy is not yet competitive with conventional power and transportation fuels, even with the benefit of current carbon prices. Significant research and technology advancement as well as industrial scaling-up are required before they will be ready to fulfil a large portion of the world's energy needs. BP is working alongside industry, research and academic partners, policymakers and regulators to develop and deploy alternative energy technologies so that they can ultimately play a significant role in our energy mix.

We believe renewable energy policy and investment decisions should be based on realistic assessments of their costs, performance and demonstrable progress toward commercial viability relative to conventional fuels. These technologies need sufficient policy support to help them advance, with enough deployment to encourage the learning and innovation necessary to drive down their costs and improve efficiency. Overly generous support, however, for very large-scale deployment could remove the incentive for technology innovation and limit the use of more immediate and affordable alternatives, such as natural gas, for reducing greenhouse gas emissions and providing energy security.

## Canadian oil sands

With our partners, BP is working to extract this vast resource responsibly, taking into account stakeholder concerns

Canada's oil sands hold one of the world's largest supplies of oil, second in size only to the resources in Saudi Arabia. As such, oil sands have the potential to contribute to energy security for the US, Canada and other markets for many decades to come.

BP is involved in three oil sands projects, all of which are located in the province of Alberta. Development of the Sunrise Energy Project, our joint venture with Husky Energy, is under way, with production expected to start in 2014. The other two proposed projects are being appraised for development.

Oil sands projects have raised concerns regarding their commercial viability, associated greenhouse gas emissions, and impacts on land, water use and local communities.

### Responsible management and oversight

We carefully reviewed and approved the decision to invest in Canadian oil sands projects, taking into consideration environmental, social and financial concerns. As with all of our projects, whether operator or not, we will monitor the delivery of these projects and the mitigation of risk.

Our partnership agreements allow BP to influence the strategic direction of all of our oil sands projects. The projects are managed through governance committees, with equal representation from BP and our partners. The committees meet quarterly to ensure that the projects are proceeding in line with the direction set by their members. The operator is required to provide timely reporting on various financial, operational and safety metrics that are benchmarked against BP performance expectations.

### Commercial viability of oil sands projects

BP requires oil sands projects, like all of its investments, to be commercially viable over the life of the project. In gauging this, we factor in BP's view on carbon pricing and carbon regulation evolution; economic forecasts, such as fluctuations in the oil price; and potential policy changes, such as national legislation intended to address climate change. Taking these factors into account, we require oil sands projects to make an acceptable rate of return at an oil price of \$60 a barrel, given our expected oil price range of \$60–\$90 a barrel out to 2015.

### Environmental and social impacts

#### Impact on the landscape

The extraction process we plan to use, in situ steam assisted gravity drainage (SAGD) technology, involves the injection of steam underground. The steam liquefies the bitumen, allowing it to flow to the surface through production wells. Unlike mining, in situ development creates a smaller physical footprint and does not involve tailing ponds. Steps will be taken to help minimize impacts on the ecosystem, animal corridors and sensitive areas, and land reclamation work will be undertaken as the project progresses.

#### Greenhouse gas emissions

A key concern regarding oil sands operations using SAGD is the amount of greenhouse gas emissions produced from steam generation.

Recent 'well-to-wheels' studies, which measure total GHG emissions from production through to consumption, have found the life cycle emissions for oil sands-based products to be 5–15% higher than those from products from average crude oils consumed in the US. Since 1990, advances in technology have helped to reduce oil sands emission levels, and we are working with our joint-venture partners to make further improvements.

We are intending to use a lower-carbon fuel source, natural gas, to generate steam for all of our projects. Other options under consideration include implementing new

technology and operating processes to improve the efficiency of our energy use and evaluating carbon capture and storage as a long-term mitigation opportunity.

#### Water

Water supply and management are key elements in planning a SAGD project. We plan to draw the water used to make steam primarily from underground aquifers and, where possible, non-potable water will be used.

Sunrise has been designed so that more than 90% of the water required for steam generation will be continuously recycled. Water that cannot be recycled will be disposed of in underground aquifers for permanent storage.

#### Managing the community impact

Our oil sands projects, whether BP-operated or not, are being developed in consultation with affected local communities. For example, our partner Husky Energy has consulted with Aboriginal communities and other stakeholders since the early planning stages of Sunrise. Husky logs stakeholder concerns and develops mitigation plans, as appropriate; these plans are then tracked to help ensure commitments are fulfilled.

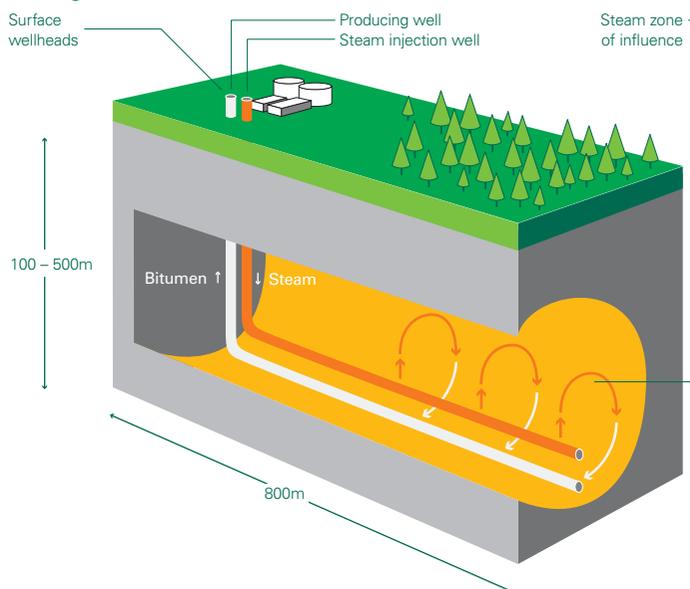


**BP Canada 2010  
sustainability report**

[bp.com/canadasustainabilityreport](http://bp.com/canadasustainabilityreport)

### Steam assisted gravity drainage

A horizontal well is located near the bottom of the reservoir. Steam, produced using natural gas, is injected into a second horizontal well located approximately five metres above and parallel to the producer. The steam heats the bitumen allowing it to flow along with condensed steam to the lower well for production.



## Climate change

Climate change is a major global challenge – one that will require the efforts of governments, industry and individuals



Current forecasts underscore the size of the climate change challenge. BP's analysis suggests that CO<sub>2</sub> emissions could rise by 27% by 2030 despite expected tightening in global climate policy. Even assuming that more aggressive policy changes are enacted, carbon emissions are likely to rise by up to 9% by 2030. These are projections, and not propositions for a desired outcome.

The scale of this challenge is such that it can only be met through policymakers acting to provide a clear, stable framework for the private sector to invest and for consumers to choose wisely. The UN climate change conference in Cancun marked a positive step in this direction, but clearly much work remains to be done.

### Our view on the policy priorities

We support policies that we believe can address climate change while also making it possible for society to meet growing demand for secure and affordable energy.

#### Carbon price

We support the use of a carbon price – one that applies economy-wide and treats all carbon equally, whether it comes out of an industrial smokestack or a car tailpipe. Carbon pricing will make energy efficiency and conservation more attractive, and make lower-carbon fuels, such as natural gas, nuclear power and renewables, more cost competitive within the energy mix. While a global emissions cap-and-trade system should be the long-term goal, we recognize that regional and national approaches are a necessary first step, provided temporary financial relief is given to domestic industrial sectors that are internationally traded.

#### Energy efficiency

Policies that emphasize efficiency in the production and use of energy can have a material impact on the levels of greenhouse

gas emissions while also reducing energy demand overall. In some cases, regulation and standards may be needed in addition to a carbon price, for example for vehicles, buildings and appliances.

#### Transitional support for low-carbon energy

We believe governments need to provide limited and time-limited support for the development and early deployment of emerging low-carbon technologies, including renewables and carbon capture and storage. Such transitional support should be provided only when there is clear evidence that an emerging technology has the potential for significant carbon reduction, and for sufficient cost-reduction to enable the technology to become commercially competitive with the help of a carbon price. Our view is that transitional support should be offered only at a level and for as long as is necessary to achieve these goals, and not as an ongoing subsidy to deliver carbon reduction itself.

#### Technology research

We believe policy support is needed for increased technology research and innovation to provide low-carbon options for the future.

### Adaptation to climate change impacts

It is predicted that as a result of increased levels of greenhouse gas emissions, the climate in the future will change. Some areas of the world are already vulnerable to more extreme weather events, such as severe rain and flooding. We are taking steps to prepare for the potential impacts of climate change on our existing and future operations.

Looking at historic trends provides a simple forecasting model. We also use more sophisticated models to predict likely impacts. When we identify climate change-related risks that could affect our projects or operations, we put an appropriate mitigation plan in place. In some locations, we have already taken steps to adapt to climate impacts.

# BP's programme of action on climate change

We are taking practical steps similar to those we advocate for society and public policy



1 Hong Kong, China

2 Scientist, BP Fuels and Lubricants Technology, Pangbourne, UK

3 Working towards efficient operations in Kwinana, Australia



**Karina Litvack**  
Head of Governance & Sustainable Investment, F&C Management Ltd

BP has a long and distinguished history of leading its industry in facing up to the threat posed by climate change, and the *BP Energy Outlook 2030* is a further step in this effort to underpin long-term planning with hard data. But this candid assessment of future trends – which reveal a collective failure to avoid dangerous climate change – suggests a willingness to respond passively to soaring energy demand without driving transformational change in the industry. If BP does not lead, others will, calling into question the viability of its business model in 2030.

## Assessing the carbon costs of our activities

We require all new projects with material carbon emissions to factor in a price of carbon that can realistically be expected in the relevant country over the life of the project. For such projects in industrialized countries, we currently use a price of \$40 per tonne of CO<sub>2</sub>, and projects are required to run sensitivity tests at significantly higher CO<sub>2</sub> prices. In reality, this price is substantially higher than the prices currently reached for places like the EU where a carbon pricing system is already in place. But as a basis for assessing the economic value of the investment and optimizing the way each project is engineered, we believe factoring this price into our investments can help keep them competitive in the future, when we expect carbon to have a more robust price.

## Stressing efficiency in our operations

We seek to increase energy efficiency across BP by requiring our existing operations to incorporate energy use in their business plans, and to actually implement technologies and systems to improve it. Since 2002, we have estimated the annual reductions from these actions. By the end of 2010, the running total of these reductions was approximately 8 million tonnes.

## Investing in lower-carbon energy products

We are increasing our production of natural gas and making significant investments in advanced biofuels for transport, as well as wind and solar for power generation. We see natural gas as a key part of the lower-carbon economy, as it is a plentiful resource that releases less CO<sub>2</sub> than other fossil fuels when burned. Most importantly, the technologies needed to produce and use it are widely available today. BP is working to find and produce gas around the world, including onshore projects in the US and offshore developments in the UK and Egypt.

## Supporting technology and policy research

In our own labs and through wide-ranging funding for academic research programmes, we are helping to find climate change solutions for the future. In 2010, we extended our support for the Carbon Mitigation Initiative at Princeton University, which is conducting research into biofuels technologies, improved oil and gas recovery and carbon storage. At the Energy Biosciences Institute in the US, scientists have progressed many different strands of energy-related bioscience research, including finding new feedstocks for biofuels and researching potential uses for microbes in enhanced oil recovery. We also support energy and climate policy research at Harvard University, MIT and Tufts University.

## Developing efficient fuels and lubricants

We work in partnership with vehicle and equipment manufacturers to improve the overall efficiency of use of our fuel and lubricant products. We have a relationship with Ford that covers several areas. Ford's EOnetic models – including the Fiesta, Focus and Mondeo – are engineered with specially formulated advanced Castrol lubricants, which improve fuel efficiency and reduce CO<sub>2</sub> emissions.

## Conducting education and outreach

We engage in the climate change policy debate and seek to spread awareness of climate change among our customers and the public. At the Cancun climate change conference in 2010, we participated in forums and events and joined nearly 1,000 businesses in signing the Cancun Communiqué, a statement of what these businesses thought negotiators at the conference should achieve. Climate change is a key topic within our programmes for educational outreach. For example, our Carbon Footprint Toolkit teaches secondary school students about carbon emissions, impacts, choices for reduction and alternative energy supplies.



**Climate change**  
[bp.com/climatechange](http://bp.com/climatechange)

# Alternative energy BP is focusing on low-carbon businesses that are aligned with our core capabilities and have the potential to be a material source of energy in the future



Since launching our alternative energy business in 2005, we have invested more than \$5 billion in our portfolio, including biofuels, wind, solar and carbon capture and storage.

## Biofuels

BP is working to produce biofuels – today and in the future – that are low cost, low carbon, sustainable and able to fulfil the world’s transportation fuel needs on a large scale.

### The future for sustainable biofuels

We are investing in biofuels because we believe there is scope for many more advanced, sustainable products. In fact, our analysis suggests biofuels could make up as much as 30% of global incremental demand for transport fuels over the period 2010-2030.

At our BP Biofuels Global Technology Center, located in San Diego, our research activities include work to commercialize a new technology for turning energy grasses and other lignocellulosic materials into biofuels. We also continue to work with DuPont to develop the new fuel molecule, biobutanol, which has a higher energy content and can be blended with gasoline in higher percentages than the conventional biofuels it will replace.

### The biofuels supply chain

As well as producing biofuels, BP purchases and blends significant quantities of biocomponents produced by other operators into fuels for markets where policies require that gasoline and diesel sold to motorists include a proportion of biofuels. We search out suppliers who are best able to meet a range of general and feedstock-specific sustainability requirements.

In jurisdictions where legal standards for sustainability are being established and implemented, we will seek to require the inclusion of contractual sustainability clauses. In jurisdictions where legal sustainability requirements have yet to be established, we provide guidance to encourage suppliers to adopt sustainable practices based on viable voluntary principles and criteria.

BP participates in several multi-stakeholder groups convened to create and certify voluntary standards and guidelines for farmers growing crops that are used in biofuels production, including Bonsucro: Better Sugarcane Initiative, and the Roundtable on Sustainable Palm Oil.

## How sustainable are biofuels?

We believe that biofuels, when done well, can be produced sustainably and can have positive impacts on carbon emissions, energy security and rural development. We are aware that sustainability concerns have been raised at local and global levels.

### Changes in land use

The UN Food and Agriculture Organization estimates that just 1% of the world’s arable land is used for biofuel feedstocks. Nonetheless, growth in demand for biofuels could force changes in land use, which can cause a release in CO<sub>2</sub>. There is concern that, in some cases, this could negate the positive CO<sub>2</sub>-reducing impact of using biofuels grown on that land. We believe biofuels can and should be grown without adversely impacting land with high stocks of CO<sub>2</sub>, such as rainforests or peat soils. We are focused on producing lignocellulosic biofuels from high-yield energy grasses that require less land than other alternatives, and we carry out detailed environmental impact assessments to help us avoid negative impacts related to changes in land use.

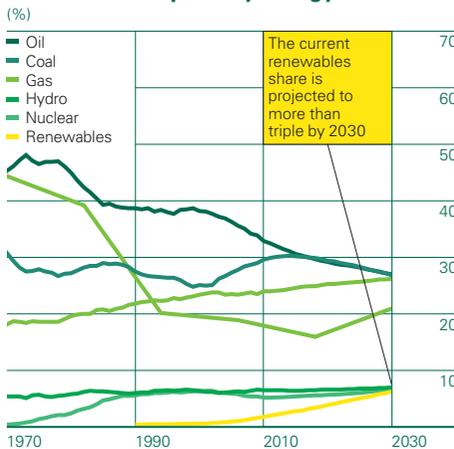
### Food security

Recent commodity price rises have once again raised concerns about what impact, if any, the increased production of biofuels has on food availability and price. We believe the world currently has sufficient land to meet demand for food, animal feed and biofuels. However, to maintain this, more biofuel production needs to come from non-food crops. These include perennial energy grasses that achieve high yields, requiring less land to produce each gallon of fuel than corn and other conventional crops. We are developing a commercial project to produce such fuels in the US.

### Water

Water availability is an increasingly serious concern in many parts of the world. At BP, we are focusing on perennial biofuel feedstocks, such as sugarcane and energy cane, which grow well in tropical climates, where rainfall is abundant. We consider water availability and quality in our project screening and impact assessments for each biofuels project.

## Share of world primary energy



 **Getting biofuels right**  
[bp.com/gettingbiofuelsright](http://bp.com/gettingbiofuelsright)



- 1 Developing bio crops in Texas, US  
 2 Goshen North wind farm, Idaho, US  
 3 Workers install solar panels at the FedEx hub, California, US

## Wind

Wind power is safe, clean and increasingly affordable – with the potential for production on an ever larger scale. BP has operational wind farms in seven US states. We have focused our wind portfolio on these locations because we think this makes the most business sense.

Provided government policies give wind power support to commercialize and grow, we believe wind power production, which is now growing globally at an annual rate of around 30%, can contribute significantly to the 21st-century energy mix.

### Wind energy and sustainability

While wind farms can be an attractive alternative energy offering, they can also stir debate. In the planning stages for each new wind project, we review the potential social and environmental impacts and take steps to manage any negative impacts through engineering design changes, technology and other elements.

For example, at our wind farm project in Colorado in the US, we worked with the US Fish and Wildlife Service and the Colorado Division of Wildlife to identify the distribution of wildlife within the project area. In response, we put avoidance measures into place,

including a buffer zone between the wind turbines and identified sensitive areas.

### Getting wind-generated electricity to high-population areas

Wind farms are often sited in remote locations, well away from population centres. In many areas ripe for future wind energy development, the transmission infrastructure needed to bring that energy to market does not yet exist. In US states where BP operates or plans to operate wind farms, we are working with relevant government agencies to promote vital transmission upgrades, to encourage the construction of new lines, and to promote fair-cost allocation policies with respect to all transmission.

## Solar

BP is working to unlock solar's immense potential as a power source. Technological advances are making a big difference. In the past five years, BP has developed and demonstrated several key innovative solar technologies to increase the energy output, improve longevity, ease of installation and operating and maintenance.

We support a range of research and development projects aimed at expanding the future use of solar power. Through a new technology designed to make solar cells more efficient in extremely high temperatures, InnerCool™, we have demonstrated increases in energy generation of approximately 3%. We piloted this technology at a university in Saudi Arabia in 2010 and plan to introduce it more widely in 2011.

### Sustainability in the solar supply chain

We work with our third-party manufacturers of solar components to ensure that the products they supply meet BP quality standards. Quality assurance levels are written into our agreements and are rigorously examined as part of the selection process and monitored on an ongoing basis. We test our products beyond the International Electrotechnical Commission standards at all our locations.

We have a comprehensive supplier compliance audit programme to provide assurance that our contractors comply with all applicable laws, regulations, policies, standards, directives and codes pertaining to health, safety and the environment. We conduct in-person audits of our suppliers and take prompt action in the case of any instances of non-compliance.

## Carbon capture and storage

Carbon capture and storage (CCS) has the potential to play a significant role in the world's response to climate change, by decarbonizing energy and other industrial operations on a large scale. The technologies needed to support CCS already exist for the most part – some have long been used to enhance oil recovery from depleted reservoirs. Bringing them together in full-scale CCS demonstration projects and then scaling up CCS deployment around the globe do however present a number of challenges, the greatest of which is cost. Achieving the potential of CCS will take many years and require the collaboration of multiple companies, technology experts, regulators and governments and the communities affected by projects.

With our joint venture partners Statoil and Sonatrach, we have been operating a CCS demonstration project at the In Salah gas field in Algeria since 2004, injecting and storing up to 1 million tonnes of CO<sub>2</sub> per year in geological formations underground. BP is reviewing other potential CCS opportunities in locations where the regulatory framework is in place, where the policy mechanisms and economics make projects viable, and where there is a strategic fit with our core business.



### Alternative energy

[bp.com/lowcarbonenergy](http://bp.com/lowcarbonenergy)



### Ernst & Young observation

BP has highlighted its work to develop and commercialise advanced biofuels and some of the associated concerns, including food security and water management. The relative importance of issues varies across the supply chain. In Europe, BP faces challenges associated with demonstrating that it can procure biofuels made from sustainable feedstocks and achieve the carbon savings required by legislation. Our discussion with BP in Brazil highlighted that fair labour practices in agricultural supply chains are an important area where they are engaging with local stakeholders.

# Safety

Safeguarding the people working for BP, and ensuring our operations are designed and managed properly must always be at the heart of how we run our business

 **BP and safety**  
[bp.com/safety](http://bp.com/safety)

## Systemic approach

Our management system drives a rigorous approach to safety, risk management and operational integrity across the company

Page 31

## Competency and capability development

How we provide our workforce with the skills they need to apply our systems and processes effectively to deliver safe operations

Page 31

## Preventing oil spills

How we strive to prevent oil spills by applying good design principles along with robust engineering, operating and maintenance practices

Page 33



# Safety management

We recognize that BP's ability to operate safely has been called into question, and we are taking broad steps to strengthen the safety culture throughout our business

## Systematic approach

BP took steps to strengthen the processes and systems for safety and risk management following the 2005 fire and explosion at the Texas City refinery. As BP learns from the events of 2010, we are continuing our safety journey under new leadership and with strengthened and renewed vigour. The Deepwater Horizon accident showed us that we must work harder on our safety management procedures and our safety culture and behaviours.

BP has redefined and strengthened the scope and accountabilities of the group function for safety and operations, establishing the new independent safety and operational risk function. While the business line continues to be accountable for operational delivery, the function holds the authority to intervene in all safety and operational aspects of BP's technical activities.

The main way BP drives a rigorous and systematic approach to safety, risk management and operational integrity is through our operating management system (OMS), which includes required and recommended practices. We review and develop the practices contained in our OMS as we learn from audits, risk assessments and incident investigations, including Deepwater Horizon.

**“We are committed to learning the lessons from these shattering events at all levels and in a way that goes far beyond the specifics of deepwater drilling. There are lessons for us relating to the way we operate, the way we organize our company and the way we manage risk.”**

Bob Dudley  
Group Chief Executive



**Managing operational risk**  
Find out more on page 16

## Competency and capability development

Our training and development programmes enhance the capability of our staff at all levels to deliver safe, reliable, responsible and efficient operations.

We are incorporating learnings from the events of 2010, particularly around the practical application of process safety. We are introducing an additional term on process safety and systematic management at our Operations Academy for senior operations leaders, and have rolled out a Managing Operations programme to mid-level leaders on continuous improvement, process safety management and the OMS. We also continue our Operations Essentials programme for frontline leaders and technicians, which seeks to embed the BP way of operating as defined by our OMS.

## Rewarding safe operations

To further encourage excellence in safety and operational risk management, we are conducting a fundamental review of how the group incentivizes business performance, including reward strategy.

We are putting in place a new reward framework that will promote safe, responsible and sustained performance, balancing the needs of today with those of tomorrow. All employees will be assessed on their personal contribution to safety and risk management; effective teamwork, skills development, careful listening and adherence to group standards; and their delivery of annual goals and contribution to BP's long-term strategy.

In the final quarter of 2010, individual performance bonuses were based solely on the achievement of safety and operational risk management targets.

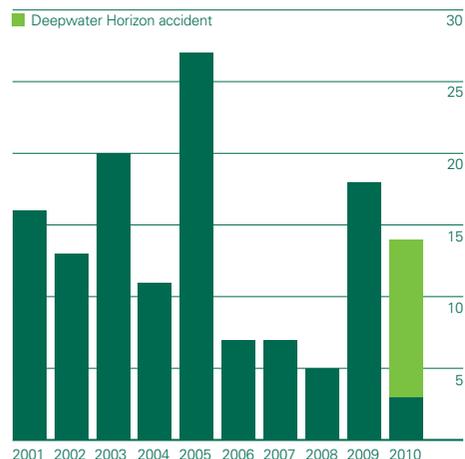
## Auditing our safety performance

The global safety and operations audit team, working independently of the operating sites, assesses the site against predefined protocols. This work is essential to our safety management as it helps us to measure the effectiveness of our operational risk management activities. The audit team produces its findings and agrees the actions with the site's leadership.

Over time, the audit team tracks the site's progress against these corrective actions and verifies completion. The audit team reports quarterly to executive management, highlighting any outstanding issues. The board's safety, ethics and environmental assurance committee reviews the audit results annually.

By the end of 2010, the team had completed 120 audits in total. More than 12,000 actions have been raised, with approximately 9,900 closed out.

## Workforce fatalities



## Ernst & Young observation

We saw evidence that BP's approach to auditing safety is evolving. For example, protocols for safety and operations audits have been updated to align with OMS elements and changes to action due dates will be reported as overdue if not completed by the original due date. The audit team has also shared insight and areas for further focus from the first three years of activity with the group operations risk committee. Later this year, the audit team will need to consider the impact of BP's programme of changes to safety and risk management.

# Our safety record We expect all our personnel, whether at our refineries, on our rigs or ships, or at our offices, to take steps to keep themselves and those around them safe

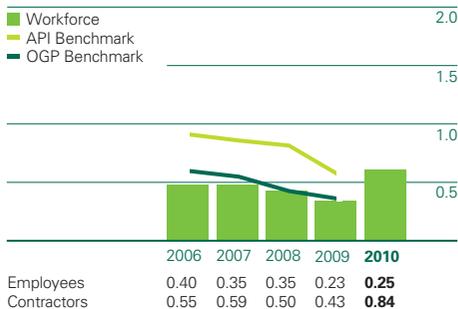
In 2010, the company reported 14 workforce fatalities, including the 11 workers on the Deepwater Horizon in the US and three work-related fatalities in the Netherlands, Germany and Canada. All 14 individuals were contractors. We regret the loss of these lives and recognize the tremendous loss felt by their families, friends and co-workers.

We track both recordable injuries and the day away from work frequency, as these are industry-standard measures to help gauge how we are managing our operations to prevent harm to our workforce.

The nature of the Gulf Coast response effort has resulted in significantly higher personal safety incident and DAFWC rates. Nine work cases resulting from the Deepwater Horizon incident and nine as a result of an air crash in Canada also contributed to the substantial increase.

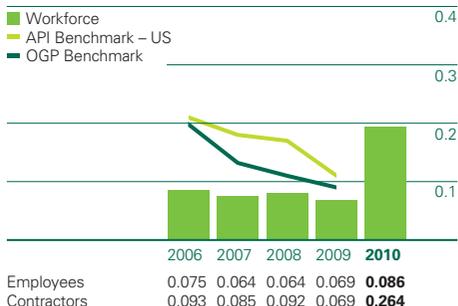
## Recordable injury frequency (RIF)

(per 200,000 hours worked)



## Days away from work case frequency (DAFWCF)

(per 200,000 hours worked)



## Our performance in the US

We recognize that there are concerns about the serious incidents that have occurred in our US operations since 2005. These include the fire and explosion at the Texas City refinery, the Prudhoe Bay pipeline leak in Alaska, and the Deepwater Horizon accident in the Gulf of Mexico. We've learned from each of these events, taking measures to strengthen the safety of our people and equipment in the US and elsewhere.

### US refineries

The Texas City incident has driven many changes in our operations, including the relocation of portable buildings away from hazardous zones and a renewed commitment to the installation of safety-instrumented systems, across the company. We also increased training at all levels of the organization.

Taking a global perspective on managing safe operations, we have sought to standardize our approach through our group-wide operating management system. All our operated refineries and petrochemicals plants in the US and abroad have transitioned to this system and are in the process of embedding it into their day-to-day operations.

### Integrity of pipelines in Alaska

Following the spill in Alaska, BP in Alaska, along with our other sites, has undergone a programme of pipeline repairs or upgrades, improved corrosion monitoring, preventative maintenance and the implementation of new company standards for control of work and integrity management. While Alaska remains a challenging operating environment, there has been significant and demonstrable progress. One example of that progress is the 31% reduction in corrosion- and erosion-related leaks in 2010 relative to 2006.

### Deepwater Horizon accident

The Deepwater Horizon accident showed us that we must work harder to embed our safety management procedures and behaviours. We aim to deliver primarily through an enhanced safety and operational risk function independent of the business line; reorganization of our upstream business; review of employee reward to increase the focus on performance in safety and operational risk management; and examining how we can strengthen the oversight of contractors.

## Independent Expert's report

The BP US Refineries Independent Safety Review Panel was commissioned in 2005 following process safety incidents at BP's Texas City refinery. L. Duane Wilson, who is serving a five-year term as Independent Expert to the board, monitors BP's progress in implementing the recommendations of the Panel. Some of the Panel's recommendations were made specifically to BP's board and executive management, others to refinery management, and some to BP's five US refineries. Mr Wilson, a member of the Panel, is a recognized expert on refinery process safety matters.

### Assessing progress

Mr Wilson and his team visit each US refinery at least twice each year and hold numerous and frequent meetings with personnel at all levels of the BP organization. These include regular teleconferences and meetings with executives within Refining and Marketing and Safety and Operational Risk, as well as refining and logistics technology leaders and the US refining central team.

Mr Wilson also draws on progress reports and other documentation from BP, including implementation status reports; process safety performance indicators reports; overtime reports (to monitor the potential for worker fatigue); open and overdue process safety action item reports; incident investigation reports; and process safety audit reports.

The Independent Expert and his team verify selected information provided by BP about implementation of the Panel's recommendations through sampling and selective, in-depth monitoring, evaluation and confirmation.

### Informing the board

Mr Wilson reports to the board through the chair of the safety, ethics and environmental assurance committee. In addition to an annual written report, he makes an annual oral presentation of his observations and findings to the board, assessing BP's progress in implementing the Panel's recommendations. We make the written report available on our website each year. The fourth annual report was submitted in March 2011.

 [Summary and full report  
bp.com/independentexpert](http://bp.com/independentexpert)

## Preventing oil spills

We strive to prevent oil spills by weaving process safety into every stage of the design, operation and management of our operations



Lingen refinery, Germany

By assuring the integrity of our operations, vessels and pipelines used to contain and transport oil and other hydrocarbons, we work to prevent oil spills and losses of containment.

### Process safety

Process safety involves applying good design principles along with robust engineering, operating and maintenance practices. For BP, this means ensuring the plant is designed, maintained and operated properly to avoid failures, such as spills or explosions, that can result in injuries and impacts to the environment.

To track our progress in process safety management, we measure lagging indicators that record events that have already occurred, such as oil spills, and leading indicators that focus on the strength of our controls to prevent undesired incidents, such as inspections and tests of safety-critical equipment. A suite of lagging and leading indicators is reported quarterly to the group operations risk committee within the HSE and Operations Integrity Report.

We have been working with bodies such as the Center for Chemical Process Safety, the American Petroleum Institute and American National Standards Institute for several years on the development of process safety metrics, definitions and guidance for the downstream part of our business. Additionally, we have been collaborating with our industry peers through the International Association of Oil and Gas Producers to adapt this work for the upstream. We will apply the new metrics across the group and continue to work with the industry to promote accurate data collection and reporting.

### Loss of primary containment

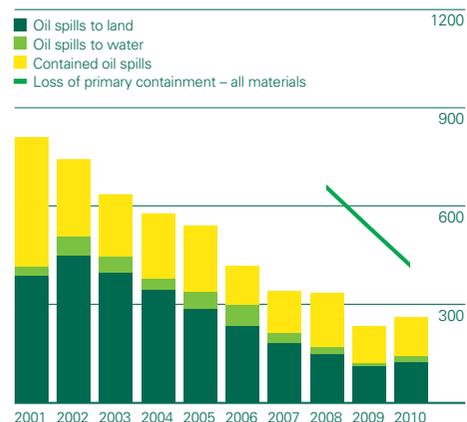
Measuring the loss of primary containment is a useful measure of process safety as it includes gaseous releases and non-hydrocarbon releases as well as oil spills. Loss of primary containment is the unplanned or uncontrolled release of material, excluding non-hazardous releases such as water from a tank, vessel, pipe, railcar, or other equipment used for containment or transfer. We are progressively moving towards this as one of our key indicators for process safety.

### How we're learning from Deepwater Horizon

The Deepwater Horizon accident resulted in one of the largest accidental marine oil spills in history. We are taking measures to help safeguard against a recurrence of this type of accident. In 2010, BP undertook a number of immediate actions:

- Blowout preventers (BOPs) used on BP-operated projects, along with other well-control equipment, were checked to confirm that they had been properly maintained and are capable of shutting in the well in an emergency.
- Remotely operated vehicles were confirmed to be capable of activating BOPs in emergency situations.
- A new decision matrix, designed to aid key decisions on well design and operations, was developed and distributed to our operations globally.
- Enhanced training and development programmes, particularly around the practical aspects of process safety techniques.

### Number of oil spills



### Developing technology to enhance our corrosion detection

BP is deploying a state-of-the-art integrity monitoring system in its refineries worldwide to inform decision-making in corrosion monitoring and management.

Developed by monitoring systems specialist Permasense, in partnership with Imperial College London and BP, the new system offers corrosion engineers, inspectors, planners and plant managers previously unavailable insights into the condition and capability of critical oil and gas assets. The early warning system enables BP teams to intervene to minimize or prevent leaks and spillages and any associated environmental impacts caused by corrosion.

The Permasense system has been successfully piloted at BP's refineries in Germany and in the US as part of BP's refining and logistics technology programme.

→ **Preventing oil spills**  
[bp.com/oilspills](http://bp.com/oilspills)

→ **Managing oil spills**  
 Find out more on page 37

# Environment

Many of the locations in which we operate present challenging environmental sensitivities, so managing our impact in these areas is always at the core of our activities

 **BP and environment**  
[bp.com/environment](http://bp.com/environment)

## Life cycle approach

Our life cycle approach to managing environmental impacts begins in early project planning and continues through operations and beyond

Page 35



## A focus on water

How BP is taking a more strategic group-wide approach to water management in recognition of water scarcity and pollution issues

Page 36



## Managing oil spills

Our approach to managing and mitigating the impacts of oil spills and how we are reviewing our plans in light of Deepwater Horizon

Page 37



# Environmental management

The oil spill in the Gulf of Mexico dramatically highlighted the consequences a single accident can have on an ecosystem and the need for rigorous environmental management

## Life cycle approach

We work to understand and manage the sensitivities of the environments in which we operate, and our responsibilities to them, from beginning to end of our operations.

Our operating management system lays out the steps and safeguards we believe are necessary to maintain responsible operations, helping our businesses around the world to understand and minimize their impacts, whether to land, air, water, flora or wildlife.

We also have specific group requirements and recommendations governing our identification and management of potential impacts of projects that carry particular environmental and social risks; these apply to major new projects, projects in new access locations, some acquisitions negotiations, and those that could affect an international protected area.

Our systems and practices are designed to help us to:

- Identify and assess potential environmental impacts in the planning stages of a project or acquisition.
- Take appropriate steps to mitigate impacts throughout project execution and operations.
- Continue to monitor and mitigate impacts after operations have ended and we have left a site, through our decommissioning and remediation strategy.

We conduct, at least annually, a formal process to identify and assess risks and emerging issues, including environmental and social issues, and we do this at both group and business level.

All our major operating sites are certified under the international environmental management system standard ISO 14001, with the Texas City plant and Tangguh LNG successfully receiving certification in 2010.

## The impact on the Gulf Coast

With the long-term impact of the oil spill to the environment as yet unknown, we can only provide an initial rather than definitive account of it. We will continue to report on our clean-up and environmental research findings at [bp.com/gulfofmexico](http://bp.com/gulfofmexico).

We have been working with several external agencies to monitor the environmental impacts of the spill and to plan our response and restoration strategies. As we learn from our experience, we are incorporating the lessons learned into our environmental management processes and practices applicable to our global business. See our Gulf of Mexico section for more information.

## Sensitive areas

We have environmental processes, requirements and recommendations for projects in or near sensitive areas, including international protected areas. Our international protected areas classification includes the International Union for the Conservation of Nature (IUCN) I-IV, Ramsar, and World Heritage designations. These include a screening process to identify risks to sensitive or internationally protected areas and species or valuable habitats. In instances where screening shows that international protected areas might be affected, enhanced BP group governance and an escalated approval process is required. No new projects entered an international protected area in 2010.

## Compliance management

An important aspect of BP's environmental management is compliance with extensive environmental legislation.

We operate in more than 80 countries, and face diverse and sometimes very complex regulatory requirements. We are working to ensure we have robust systems and tools in place to comply with the wide range of current and emerging environmental regulations that affect us, as well as making effective use of resources and networks to share practices.

Climate change is one area where there is an increasing amount of regulation. Governments continue to identify regulatory measures at local, national and international levels. In the US, the first greenhouse gas regulations to have a significant impact on our operations will be the Environmental Protection Agency GHG Mandatory Reporting Rule. BP's affected assets and businesses are positioned for full compliance and filing of the first report in March 2011.

## Our environmental practices

Focus areas include:

Air quality	Physical and ecological impacts
Drilling wastes and discharges	Prevention of soil and groundwater pollution
Greenhouse gas and energy management	Water management
Marine mammals	Waste management
Ozone-depleting substances	

## Applying our practices in Jordan

BP applied the screening process contained in the environmental and social practices to a new onshore seismic survey and drilling project at a gas field in the Risha concession in eastern Jordan. In Risha, we aim to assist with increasing gas output at the producing field, operated by the National Petroleum Company (NPC) of Jordan.

The pre-access screening process involved 10 people from BP, seven representatives from NPC and two consultants specializing in environmental and social impact assessments.

We identified the higher sensitivity environmental screening indicators for Risha as being freshwater resources and sensitive areas.

This enabled us to prioritize and focus on these two areas and to place special emphasis on identifying the appropriate actions. Required actions related to freshwater resources, included obtaining more data to help understand the source and sustainability of groundwater in the area, paying particular attention to water security. Another identified action touched sensitive areas, planning studies and engagement with local experts on migratory birds in the area.



## Ernst and Young observation

We discussed with BP their actions to implement their methodology for identifying and managing the environmental and social impacts of projects. In light of the Deepwater Horizon incident and subsequent investigations, interest in the application of this approach in sensitive environments will increase. In particular, BP's proposed interest in the Russian Arctic highlights the need for BP to report in future on the application of this process in its most challenging operations.

# Environmental performance We manage and report on our performance for most of our environmental issues at a local level, where they are most relevant

## Local reporting

The diversity of environments in which we operate around the world means we face a variety of environmental issues. To take account of these site-to-site differences, we manage and report on our performance for air emissions, waste, water and access to protected areas at a local level, where they are most relevant.



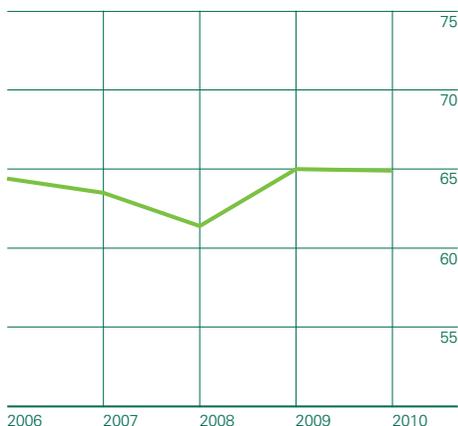
**Summary and full report**  
[bp.com/sustainabilitymappingtool](http://bp.com/sustainabilitymappingtool)

## Greenhouse gas emissions

We aim to manage our greenhouse gas (GHG) emissions through a focus on operational energy efficiency and reductions in flaring and venting. Since 2002, we have estimated the annual reductions from these actions. By the end of 2010, the running total of these reductions was approximately 8 million tonnes (Mte).

We track our greenhouse gas emissions at a group-wide level. Our GHG emissions in 2010 were 64.9Mte, compared with 65.0Mte in 2009. After stripping out the effects of acquisitions and divestments in 2010, our emissions actually increased by about 1.2Mte on a like-for-like basis. This is principally explained by the ramp-up and operation of our Tangguh LNG project in Indonesia and increased throughput at our Texas City refinery in the US. We have not included any emissions from the Deepwater Horizon incident and the response effort due to our reluctance to report data that has such a high degree of uncertainty.

### Direct greenhouse gas emissions<sup>a</sup> (million tonnes of carbon dioxide equivalent)



<sup>a</sup> We report GHG emissions on a CO<sub>2</sub>-equivalent basis, including CO<sub>2</sub> and methane. This represents all consolidated entities and BP's share of equity-accounted entities except TNK-BP.

## Using technology to manage our impacts

Many of BP's businesses research, develop and apply technology and innovative solutions to help reduce the environmental impact of energy production. These solutions might be aimed at reducing the number of wells we drill, cutting the volume of waste a processing plant produces in its operations, improving the formula of our products, or changing the way we transport them.

In our upstream business, our Environmental Technology Programme examines potential environmental risks and impacts linked to upstream activities such as access, seismic surveys, drilling and operations, and supports innovation to generate mitigating technologies.

We have funded the development of an online tool designed to assess and quantify the environmental risk associated with planned and unplanned releases to the marine environment. This was actively employed during the response to the Deepwater Horizon incident to forecast the trajectory of the oil release.

## A focus on water

Water scarcity is an increasingly pressing global issue as a result of increased industrial development, population growth and lifestyle. According to the OECD, almost half the world's population will be living under severe water stress by 2030 if no new policies to improve freshwater management are introduced. Water pollution is also of growing global concern.

BP is taking a more strategic group-wide approach to water issues, but retaining a focus on local management of what remains a local, shared resource. Our operations are required to identify environmental hazards and assess risks and opportunities to minimize environmental impacts, which includes the impacts of our water withdrawal and/or discharges. Our TATA BP Solar facility in India, which uses freshwater mainly for glass washing during solar cell manufacturing, has reduced its water consumption by approximately 30% through recycling some of the cleaner wash water. We treat our routine discharges to water to remove hydrocarbon and chemical content to a level that considers environmental sensitivities as well as legislative requirements.

Some projects are required to identify and manage the impact of their freshwater use on local communities and control the potential local impacts of wastewater discharge on receiving water bodies.



Finnart Ocean Terminal, Loch Long, UK

## Challenging long-held shipping traditions to cut emissions

The traditional approach to merchant shipping is 'full steam ahead' towards the destination port. But delays at the port can often result in time wasted outside the port or waiting for cargo, leading to increased port congestion and higher port emissions.

Our 'Virtual Arrival' system allows vessels, ports and other parties to work together to take advantage of known weather conditions and port information. This allows the vessels to slow down where possible, use less fuel and achieve an optimum arrival time.

Virtual Arrival has been shown to have the potential to reduce GHG emissions in the tanker and bulk carrier sectors by around 5%, equating to around 25 million tonnes of CO<sub>2</sub> annually, and is seen as having sector-wide implementation potential. Intertanko and the Oil Companies International Marine Forum have backed this approach and, with BP's support, have produced a best practice guide to Virtual Arrival for charterers, owners, vessel masters and terminals.

## Managing oil spills BP is reviewing its processes to manage and mitigate risks of oil spills, applying the lessons learned from the Gulf of Mexico oil spill regarding prevention and response

Despite every endeavour to prevent them, oil spills can still happen. BP aims to maintain readiness to respond on a global scale, to minimize adverse effects and facilitate rapid mitigation.

### Our approach

Our group-wide framework on crisis and continuity management defines how we respond to all unplanned and unforeseen events, including oil spills. We complete environmental impact assessments for many of our projects, using modelling and predictive assessment tools to assess the potential impact of a spill or leak. We then formulate crisis management and oil spill plans, addressing potential scenarios and response strategies, including how we would work with designated regulatory bodies in the event of a spill and what personnel and equipment would be needed.

We consider all response techniques on a case-by-case basis, taking into account safety issues, location of the spill, size and volume of the spill, spill movement, wind and sea conditions, and other factors. We select where feasible, those that offer the most effective results with the least impact on the environment.

We apply this response planning process to our upstream, midstream and downstream businesses, including offshore platforms, refineries, ships, pipelines, rail and oil storage facilities and petrol stations.

### How we are improving our oil spill response efforts

The effort to cap the well and clean up the oil in the Gulf of Mexico tested BP and its response plans and procedures at a scale not seen before in the industry. Our initial review of our response effort has highlighted the importance of stakeholder and peer collaboration, extensive systemization, timely and reliable information and, ultimately, innovation. Following the accident, we immediately took steps to strengthen our containment and response capability. We updated our oil spill response plan, and submitted it to the US Department of the Interior, and we delivered two containment caps to the UK to aid North Sea containment capability.

We continue to develop and assimilate lessons from the response effort, which we plan to incorporate into group-wide mandated practices specifically on oil spill preparedness and response.



Shoreline clean-up in Bay Jimmy, Louisiana, US

### How much oil was spilled in the Gulf of Mexico?

Before the well was contained in July, a substantial amount of oil spilled into the Gulf of Mexico. Although there are several third-party estimates of the flow rate or total volume of oil spilled from the Deepwater Horizon incident, we believe that no accurate determination can be made or reported until further information is collected and the analysis, such as the condition of the blowout preventer, is completed. Once such determination has been made, we will report on the spill volume as appropriate.<sup>1</sup>

While we understand that the exact figure is of interest to many, BP's efforts to address the potential environmental and social impacts have not been limited by the precise volume of the spill.

<sup>1</sup> See *BP Annual Report and Form 20-F 2010*, page 201, for information about the volume used to determine our estimated liabilities.

### Innovation through collaboration

During the oil spill response in the Gulf of Mexico, BP actively sought input, ideas and recommendations from across the industry.

As a result, we benefited from a number of advanced and innovative solutions in areas including containment, reservoir visualization, remotely operated vehicle usage, rapid vessel retro-fitting and application of dispersants.

We also tapped into the innovative spirit of people around the globe for their ideas and suggestions in stopping the well, containing the oil and restoring affected shorelines. We received about 123,000 ideas from more than 100 countries and set up a special team and process to evaluate them. About two-thirds of the ideas dealt with plugging the leak, with the remaining focused on ways to clean up the oil. More than 100 ideas progressed to the testing phase, and more than two dozen were deployed to help clean up the oil, including new skimmers and boom, as well as new equipment to clean beaches.

Collectively, the innovation developed and deployed during the response will improve the industry's ability to respond to future spills.



#### Preventing oil spills

Find out more on page 33



#### Gulf of Mexico response

[bp.com/gulfofmexico](http://bp.com/gulfofmexico)

# Society

We strive to make our socio-economic impact a positive one by running our operations responsibly and by investing in communities in ways that benefit both local populations and BP

 **BP and society**  
[bp.com/society](http://bp.com/society)

## Managing our impact

Through responsible operations and global and local partnerships, we aim to make a positive impact on society

Page 39



## Independent advisers

Independent advisers help us to identify and address challenges and long-term issues in key locations

Page 39



## Socio-economic development

We invest in development programmes that we believe can make a sustainable local impact – even after we've gone

Page 40



# Managing our impact

Through responsible operations and local partnerships, we aim to make a positive impact on communities

We believe each BP project and each of our operations has the potential to benefit local communities by creating jobs, tax revenues and opportunities for local suppliers. A positive impact also means making sure that human rights are respected, that we engage openly with people who could be affected by our projects and that local cultural heritage is preserved.

The oil spill in the Gulf of Mexico highlights how businesses like ours can have a direct impact on local communities and livelihoods, as well as potentially global financial repercussions for shareholders and pension funds.

## Our practices

For major new projects, as well as projects in new locations and those that could affect an international protected area and some acquisitions negotiations, detailed group practices were launched in 2010. These include guidance on how the project should identify groups that could be affected by the project, consult with them to understand their needs and concerns and carry out a social impact assessment to evaluate the potential negative and positive community impacts. Social impact assessments are often aligned with assessments of health, environmental and other impacts.

For example, BP in Norway has commissioned a three-year socio-economic impact assessment of the Skarv offshore development, to better understand the 'ripple' effect BP's presence will have on life in the local area. In Libya, where we have been conducting onshore and offshore exploration for oil and gas, we have worked with an external consultant to conduct an impact assessment looking at the impact of our projects on land usage, cultural heritage and other issues.

Following the impact assessment, we review the project plans with a view to avoiding, mitigating or minimizing the negative impacts, such as economic impacts or noise, odour and other forms of community disturbance, and making the most of positive impacts.

As our projects reach the operations stage, we aim to carry over the commitments we have made to communities into the operations phase and to manage the social impact of any changes to the operational activities of the facilities throughout the operation's full life cycle, including expansion, reduction of size and closure. When we leave a location because an operation has run its course, we aim to do so in a responsible manner, for example, by fulfilling any commitments we have made and by supporting socio-economic development programmes that do not depend on BP's presence and can have a life of their own after we've gone.

## Our social practices

Focus areas include:

Community disturbance	International protected areas
Community engagement	Moving communities
Community investment	Security and human rights
Impact assessment	Water management
Indigenous people	Workforce welfare and local employment

## Independent advisers

In locations where our impact on local communities appears to be complex and their socio-economic circumstances are difficult, we sometimes organize panels of independent advisers to help us navigate the issues and to provide independent assurance and feedback on our activities.

The Tangguh Independent Advisory Panel (TIAP) has been monitoring progress at the Tangguh LNG facility in Indonesia since 2002, before construction had begun. Since then, the panel has published annual reports, including recommendations on a range of issues, and BP has responded publicly to the reports. TIAP continues to advise BP on ways to improve its impact at Tangguh.

The Azerbaijan Social Review Commission published its fourth report in 2010. Among the findings, it applauded BP in Azerbaijan for an increased localization of its supplier base and noted the broad contribution BP is making through social projects in Azerbaijan. It also urged BP to "retain social spending at a level that makes a significant contribution to social development in Azerbaijan."



1 Stavanger, Norway

2 Mabaia agriculture project, Angola

## Revenue transparency and business ethics

Revenue transparency is a mechanism for disclosing information about revenue flows from oil and gas activities in resource-rich countries. As a member of the Extractive Industries Transparency Initiative, we work with governments, non-governmental organizations and international agencies to improve transparency in this area.

Bribery and corruption are serious risks in the oil and gas industry. Our code of conduct requires that our employees or others working on behalf of BP do not engage in bribery or corruption in any form in both the public and private sectors. In 2010, we continued to implement and enhance our anti-bribery and corruption compliance programme, including launching new processes and controls designed to proactively manage bribery risk. We support the UK Bribery Act and are working to respond effectively to the standards flowing from it.



**Bribery and corruption**  
[bp.com/briberyandcorruption](http://bp.com/briberyandcorruption)

## Socio-economic development *We invest in development programmes that we believe can make a sustainable local impact – even after we've gone*

We look for community investments that will create a meaningful and sustainable impact – one that is relevant to local needs, aligned with BP's business and undertaken in partnership with local organizations.

We seek to 'find the join' between BP's interests and those of communities. We aim to make these programmes contribute to sustainable development, rather than end their beneficial impacts when BP funding ceases or we leave a location.

For the first time, we are reporting on our efforts to bring value to host nations at a local level through our online sustainability mapping tool at [bp.com/sustainabilitymappingtool](http://bp.com/sustainabilitymappingtool).

### Building business skills

We run a range of programmes to develop local supply chains and build the skills of businesses in places where we work. These range from financing to sharing global standards and practice in areas such as health and safety. This benefits local companies by empowering them to reach the standards needed to supply us and other clients. At the same time, BP benefits from the local sourcing of goods and services.

### Supporting education and other community needs

We work with local authorities, community groups and others to deliver programmes matched to local interests and needs.

These range from education programmes to community infrastructure programmes that help people in developing economies access basic resources, such as drinking water and healthcare.

### Sharing technical expertise with national and local governments

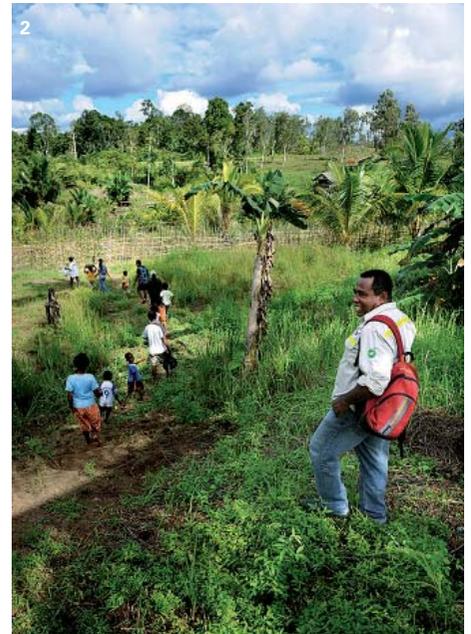
We use our technical knowledge and global reach where relevant to support governments in their efforts to develop their economies sustainably.

As well as country-specific projects, we support more general initiatives, including the Oxford Centre for the Analysis of Resource-Rich Economies, which studies how countries that are rich in natural resources, such as oil and gas, can use their resources for successful development rather than falling prey to mismanagement, corruption and other pitfalls.

### Direct spending on community programmes

In financial terms, our direct spending on community programmes in 2010 was \$115.2 million, which included contributions of \$22.9 million in the US, \$36.7 million in the UK, \$3.0 million in other European countries, and \$52.6 million in the rest of the world.

 **Society case studies**  
[bp.com/societycasestudies](http://bp.com/societycasestudies)



1 Local farmer sowing seeds in Azerbaijan

2 Organic food production project, Tangguh, Indonesia



### Enterprise development in Azerbaijan

In Azerbaijan, BP's Enterprise Development and Training Programme (EDTP) helps local companies identify gaps in their skills and capabilities and create a development plan to fill the gaps. The programme has resulted in contracts worth around \$42 million being awarded to EDTP clients since its launch in 2007. The programme itself was localized in 2010 as the US-based implementing partner ACDI/VOCA handed over to a local organization, AzerMS.

## Our approach to reporting BP's sustainability reporting – in print and online formats – is aimed at all readers with an interest in BP's social, environmental and safety performance

In this Sustainability Review, we provide our position and strategy around key sustainability topics of relevance to BP and the industry. Online, [www.bp.com/sustainability](http://www.bp.com/sustainability) examines these topics in more depth, as well as reporting on a wider set of issues. We present our local environmental and social performance information using an interactive mapping tool to help our stakeholders understand our local impacts in context. We also provide our global health, safety and environmental data in an interactive charting tool so that stakeholders can customize the information to their needs.

### Issues covered

We report on subjects that have arisen from our sustainability reporting materiality process. We identify issues via input from external stakeholders, internal subject matter experts, research and the media. We then weigh each issue in terms of its likely importance to our stakeholders and its potential impact on BP's ability to deliver its strategy. Finally, we validate our issue identification and prioritization with senior management, external stakeholders and our external auditor. All issues deemed to be of higher importance at a global level are included in our group sustainability reporting.

To help ensure that our sustainability reporting covered the issues of key concern in light of the oil spill in the Gulf of Mexico, we undertook focused stakeholder engagement and research, including two roundtable discussions on BP and sustainability in the US and the UK. Facilitated by SustainAbility, representatives of key stakeholder groups shared their expectations of BP and our reporting. We commissioned TwoTomorrows to help us develop a more comprehensive materiality process and to undertake their annual detailed benchmarking.

### Accuracy

We aim to ensure that the information we publish is accurate, complete and material and therefore contributes to building trust and credibility with key stakeholders. To achieve this, we have an established internal process for verifying our non-financial management information. Additionally, we engage professional auditors, who combine the strengths of financial auditing experience with technical competency in environmental and social standards.

### Scope

*BP Sustainability Review 2010* and [www.bp.com/sustainability](http://www.bp.com/sustainability) concentrate on performance and activities from 1 January to 31 December 2010. In addition to our group sustainability reporting, our non-financial performance communications include country- and site-level reports.

We aim to report on all aspects of our business, including joint ventures where we are the operator. Where appropriate, we also seek to provide an overview of joint venture activities where we are not the operator, but where we have significant influence.

### Frameworks and guidelines

We continue to report against the Global Reporting Initiative's (GRI) G3 sustainability reporting guidelines to an A+ level. For the first time, we reported against the second edition Oil and Gas Industry Voluntary

Guidance on Sustainability Reporting (2010) from the International Petroleum Industry Environmental Conservation Association (IPIECA), the American Petroleum Institute, and the International Association of Oil and Gas Producers. We are also actively supporting and involved in the development of a GRI Oil and Gas Sector Supplement. A full table showing how we address the GRI and IPIECA guidelines, including information on those indicators where we have not reported, is available at [www.bp.com/gri](http://www.bp.com/gri) and [www.bp.com/ipieca](http://www.bp.com/ipieca).

 **Our approach to reporting**  
[bp.com/sustainabilityreporting](http://bp.com/sustainabilityreporting)



**Jeff Erikson**  
Senior Vice President,  
SustainAbility

### Wanted: Leadership

That was the overarching theme that emerged from two roundtable discussions BP held with opinion leaders in London and Washington last autumn. In the aftermath of the explosion on Deepwater Horizon, a question on the minds of many within BP was "how do we rebuild trust?" To get answers to that question, BP asked SustainAbility to help them pull together and moderate a group of thoughtful, opinionated individuals from a variety of organizations. Environmental NGOs, socially responsible investors, social justice NGOs, peer companies, a university student and others – 18 in total – spent half a day in dialogue with BP about what it would take.

While the objective of the meeting was focused on transparency, reporting and stakeholder engagement, the discussion inevitably, repeatedly and usefully strayed into BP's forward strategy. We heard that if BP is to rebuild trust, it must go beyond transparency and engagement and demonstrate real and substantial shifts in culture, investments and strategy. There was a strong desire expressed by many of those

present at the roundtables for BP to lead the industry to a more sustainable future. "We need you", one stakeholder implored. The leadership they sought would combine operational excellence, robust external engagement and real progress towards a low-carbon economy.

BP's tone during the roundtables was humble throughout, focused much more on listening than attempting to convince. My personal sense was that the BP participants were sincerely interested in understanding and acting on the advice they were receiving. And everyone in the room acknowledged the tension between the vision that was being articulated of a company that would lead the world into a clean energy future, and the current reality of an oil and gas company that is focused on just getting back on its feet. The critical question seemed to be, as one participant in Washington put it, "will BP stand for 'Beyond Petroleum' or 'Back to Petroleum'?" Many of BP's stakeholders are looking for early signals of BP's answer to that question.

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# Independent assurance statement to BP management

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BP's *Sustainability Review 2010* (the Report) has been prepared by the management of BP p.l.c., who are responsible for the collection and presentation of information within it. Our responsibility, in accordance with BP management's instructions, is to carry out a limited assurance engagement on the Report and to include specific observations from our work in relevant sections of the Report. We do not accept or assume any responsibility for any other purpose or to any other person or organisation. Any reliance any such third party may place on the Report is entirely at its own risk.

## What we did to form our conclusions

Our assurance engagement has been planned and performed in accordance with ISAE3000<sup>1</sup> and to meet the requirements of a Type 2 assurance engagement as defined by AA1000AS (2008)<sup>2</sup>. The AA1000AS (2008) assurance principles of Inclusivity, Materiality and Responsiveness have been used as criteria against which to evaluate the Report.

In order to form our conclusions we undertook the steps outlined below:

1. Interviewed a selection of BP executives and senior managers to understand the current status of safety, social, ethical and environmental activities, and progress made during the reporting period.
2. Reviewed selected group level documents relating to safety, social, ethical and environmental aspects of BP's performance to understand progress made across the organisation and test the coverage of topics within the Report.
3. Reviewed BP's approach to stakeholder engagement through interviews with employees at group and four local businesses, and reviewed selected associated documentation.
4. Carried out the following activities to review health, safety and environment (HSE), community investment, leadership diversity and ethics dismissals data samples and processes:
  - a. Reviewed disaggregated HSE data reported by a sample of four businesses to assess whether the data had been collected, consolidated and reported accurately.
  - b. Reviewed and challenged supporting evidence from the sample of businesses.
  - c. Tested whether HSE data had been collected, consolidated and reported appropriately at group level.
  - d. Reviewed leadership diversity, community investment and ethics dismissal data at group level.
5. Reviewed BP's processes for determining material issues to be included in the Report. As part of our work, we attended two independently facilitated Roundtables on Transparency and Reporting held in London and Washington (the Roundtables) and reviewed BP's processes for responding to material issues raised through its reporting.
6. Reviewed the coverage of material issues within the report against the key issues raised in the Roundtables, material issues and areas of performance covered in external media reports and the environmental and social reports of BP's peers and the topics discussed by BP's board level committee on sustainability.
7. Reviewed information or explanations about selected data, statements and assertions regarding BP's sustainability performance.

In order to form conclusions on the information contained on pages 6 to 13 regarding the Gulf of Mexico oil spill we undertook the following additional work steps:

1. Interviewed selected BP employees involved in the response effort and accident investigation to gain a deeper understanding of matters disclosed in the Report, including the status of the response, progress with recommendations, commitments to the region and the extent of local stakeholder engagement activities.
2. Reviewed the process for determining the material issues to be included in this section of the Report, including consideration of the outputs from the Roundtables.
3. Reviewed underlying documentation and analysis relating to performance claims made in the Report.

## Level of assurance

Our evidence gathering procedures were designed to obtain a limited level of assurance (as set out in ISAE3000) on which to base our conclusions. The extent of evidence gathering procedures performed is less than that of a reasonable assurance engagement (such as a financial audit) and therefore a lower level of assurance is provided.

## The limitations of our review

Our work did not include physical inspections of any of BP's operating assets.

## Our conclusions

Based on the scope of our review our conclusions are outlined below:

### Inclusivity

*Has BP been engaging with stakeholders across the business to develop its approach to sustainability?*

- We are not aware of any key stakeholder groups that have been excluded from dialogue.
- We are not aware of any matters that would lead us to conclude that BP has not applied the inclusivity principle in developing its approach to sustainability.

<sup>1</sup> International Federation of the Accountants' International Standard for Assurance Engagements Other Than Audits or Reviews of Historical Financial Information (ISAE3000).

<sup>2</sup> AA1000AS (2008) – The second edition of the AA1000 assurance standard from the Institute of Social and Ethical Accountability.

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## Materiality

*Has BP provided a balanced representation of material issues concerning BP's sustainability performance?*

- With the exception of the subject area listed below, we are not aware of any material aspects concerning BP's sustainability performance which have been excluded from the Report.
- We consider that BP could have covered the following subject area in more depth in the Report:
  - Disclosure of future environmental performance targets.
- Nothing has come to our attention that causes us to believe that BP management has not applied its processes for determining material issues to be included in the Report.

## Responsiveness

*Has BP responded to stakeholder concerns?*

- We are not aware of any matters that would lead us to conclude that BP has not applied the responsiveness principle in considering the matters to be reported.

## Completeness and accuracy of performance information

*How complete and accurate is the HSE, community investment, leadership diversity data and ethics dismissals data in the Report?*

- With the exception of TNK-BP's GHG emissions, GHG emissions associated with the Deepwater Horizon accident and the volume of oil spilled as a result of the Deepwater Horizon accident, we are not aware of any material reporting units that have been excluded from the group wide data relating to HSE, community investment, leadership diversity data and ethics dismissals data.
- Nothing has come to our attention that causes us to believe that the data relating to the above topics has not been collated properly from group-wide systems.

*How plausible are the statements and claims within the Report?*

- We have reviewed information or explanation on selected statements on BP's sustainability activities presented in the Report and we are not aware of any misstatements in the assertions made.

## Observations and areas for improvement

Our observations and areas for improvement have been raised in a report to BP management. Selected observations are provided below. Additional specific observations regarding progress made and areas for improvement can be found in appropriate sections of the printed and online Reports. For more information on our observations, please go to [www.bp.com/sustainabilityobservations](http://www.bp.com/sustainabilityobservations).

These observations do not affect our conclusions on the Report set out above.

- BP has included increased coverage of emerging sustainability issues, in particular influencing the working practices of third parties. We discussed BP's commitment to reviewing the way it works with contractors and it will need to communicate progress made in future reporting.
- We saw that BP's materiality process has been used to prioritise the issues related to Deepwater Horizon to be included in this report. Although this process includes consideration of the importance of issues to stakeholders, some groups may consider that their individual concerns have not been addressed. Others will feel that the coverage in the report does not do justice to the complexity of certain issues.
- In light of the Deepwater Horizon incident and subsequent investigations, interest in the application of BP's approach to working in sensitive environments will increase. In particular, BP's proposed interest in the Russian Arctic highlights the need for BP to report in future on the application of this process in its most challenging operations.

## Our independence

As auditors to BP p.l.c., Ernst & Young are required to comply with the requirements set out in the Auditing Practices Board's (APB) Ethical Standards for Auditors. Ernst & Young's independence policies apply to the firm, partners and professional staff. These policies prohibit any financial interests in our clients that would or might be seen to impair independence. Each year, partners and staff are required to confirm their compliance with the firm's policies.

We confirm annually to BP whether there have been any events including the provision of prohibited services that could impair our independence or objectivity. There were no such events or services in 2010.

## Our assurance team

Our assurance team has been drawn from our global Climate Change and Sustainability Services Practice, which undertakes engagements similar to this with a number of significant UK and international businesses. The work has been led and reviewed by Lead Sustainability Assurance Practitioners.

 **ERNST & YOUNG**

Ernst & Young LLP, London  
22 March 2011

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## Our online resources

BP communicates its non-financial commitments and performance at group, country and site levels online, as well as providing interactive tools for its website visitors

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### Group reporting

Our website, [www.bp.com/sustainability](http://www.bp.com/sustainability), is an integral part of our group sustainability reporting, covering a wide set of issues and reporting on them in more depth. The website also includes detailed information about our environmental and safety performance.

*BP Sustainability Review 2010* is available in English, Mandarin Chinese, Russian and Spanish.  
[www.bp.com/sustainabilityreview2010](http://www.bp.com/sustainabilityreview2010)

### Country and site reporting

We publish country reports on our operations in Angola, Australia, Azerbaijan, Canada, Georgia, Germany, New Zealand, Southern Africa, Trinidad & Tobago and Turkey. We also maintain a library of site reports for more than 30 of our major operations.

[www.bp.com/countrysustainabilityreports](http://www.bp.com/countrysustainabilityreports)  
[www.bp.com/sitereports](http://www.bp.com/sitereports)

### Case studies

Our case studies demonstrate our sustainability efforts in action around the world and provide insight into how our policies and practices can make a difference at the local level.

[www.bp.com/casestudies](http://www.bp.com/casestudies)



### Sustainability mapping tool

Our sustainability mapping tool provides information about our local management of environmental issues that impact primarily at a local level – emissions to air, waste, water use and waste-water discharges, and about protected areas, stakeholder engagement and local content at our major operating sites.  
[www.bp.com/sustainabilitymappingtool](http://www.bp.com/sustainabilitymappingtool)



### HSE charting tool

Our HSE charting tool allows you to filter and analyze information on the group's health, safety and environmental performance – including oil spills, greenhouse gas emissions, and personal safety. Data for the past decade is available, and can be viewed or downloaded in a variety of chart formats.  
[www.bp.com/hsechartingtool](http://www.bp.com/hsechartingtool)



### BP Energy Lab

The BP Energy Lab helps people learn how to be more energy efficient. The BP Energy Calculator can help assess your energy consumption and related carbon footprint, and the energy quiz and facts show how to save energy at home, at work and at play.  
[www.bp.com/energylab](http://www.bp.com/energylab)

# Reports and publications

This report is part of BP's corporate reporting suite. We also report on our financial and operating performance and produce an annual statistical review of world energy

You can order BP's printed publications, free of charge, from:

## US and Canada

Precision IR  
Toll-free +1 888 301 2505  
Fax +1 804 327 7549  
[bpreports@precisionir.com](mailto:bpreports@precisionir.com)

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## Contact details

Your feedback is important to us. You can email the Sustainability Reporting team at [sustainability@bp.com](mailto:sustainability@bp.com)

or send us your feedback online at [www.bp.com/sustainabilityfeedback](http://www.bp.com/sustainabilityfeedback)

You can also telephone +44 (0)20 7496 4000

or write to:  
Sustainability Report  
BP p.l.c.  
1 St James's Square,  
London SW1Y 4PD,  
UK.



## Summary Review

Read a summary of our financial and operating performance in *BP Summary Review 2010* in print or online.

[www.bp.com/summaryreview](http://www.bp.com/summaryreview)



## Annual Report and Form 20-F

Read details of our financial and operating performance in *BP Annual Report and Form 20-F 2010* in print or online.

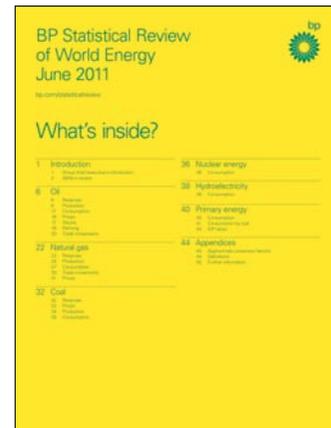
[www.bp.com/annualreport](http://www.bp.com/annualreport)



## Financial and Operating Information

*BP Financial and Operating Information 2006-2010* includes five-year financial and operating data.

[www.bp.com/financialandoperating](http://www.bp.com/financialandoperating)



## Statistical Review of World Energy

Published in June each year, *BP Statistical Review of World Energy June 2011* reports on key global energy trends.

[www.bp.com/statisticalreview](http://www.bp.com/statisticalreview)

## External reporting frameworks



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## Paper

This Sustainability Review is printed on FSC-certified Mohawk Options 100%. This paper has been independently certified according to the rules of the Forest Stewardship Council (FSC) and was manufactured at a mill that holds ISO 14001 accreditation. The inks used are all vegetable oil based.



