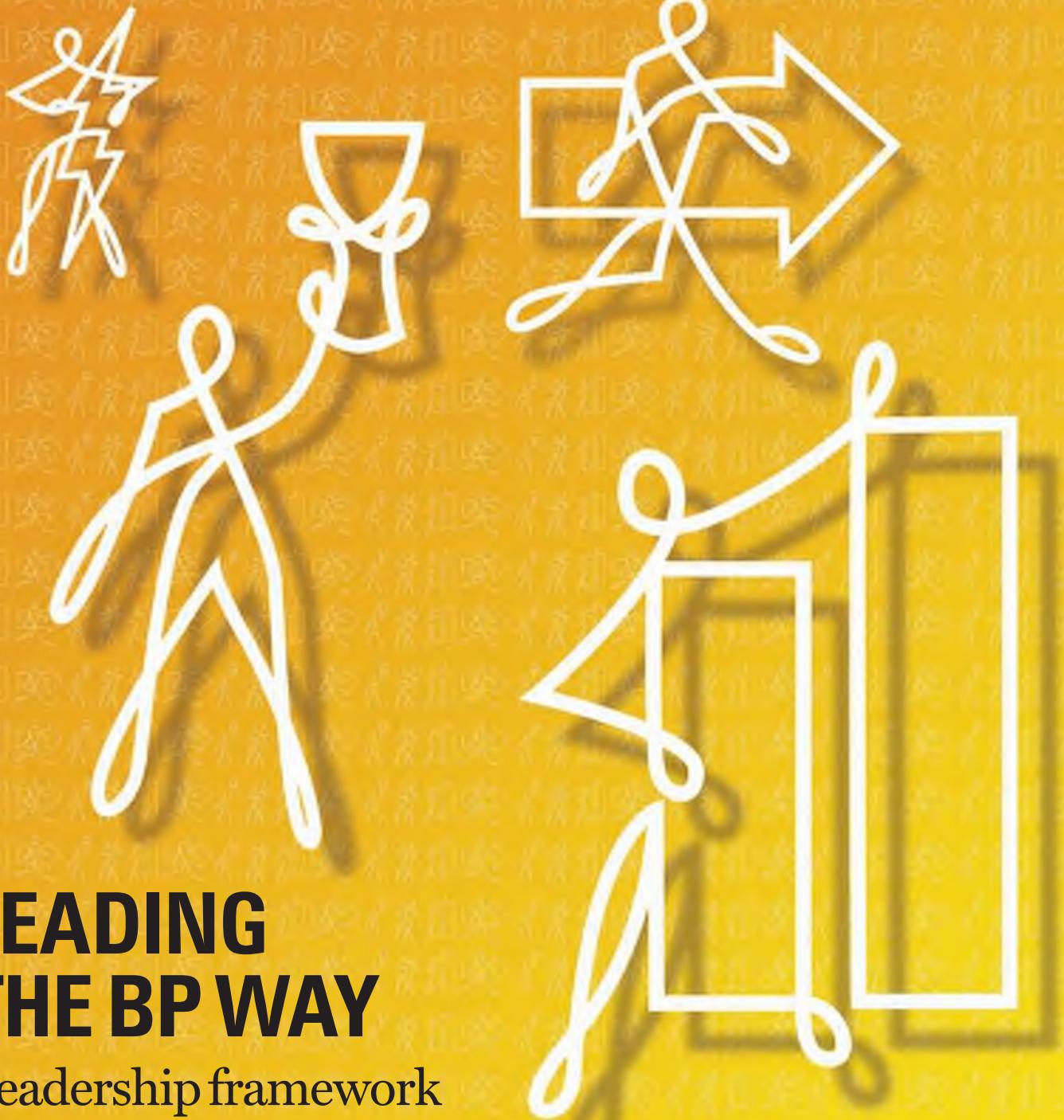


# HORIZON

THE GLOBAL PUBLICATION FOR BP PEOPLE

ISSUE 3 MAY 2008



## LEADING THE BP WAY

Leadership framework  
to deliver forward agenda

Transformation in  
information technology

Report highlights a  
record year for safety

Fibre optic solution  
to pipeline threats

Na Kika platform leads  
production performance

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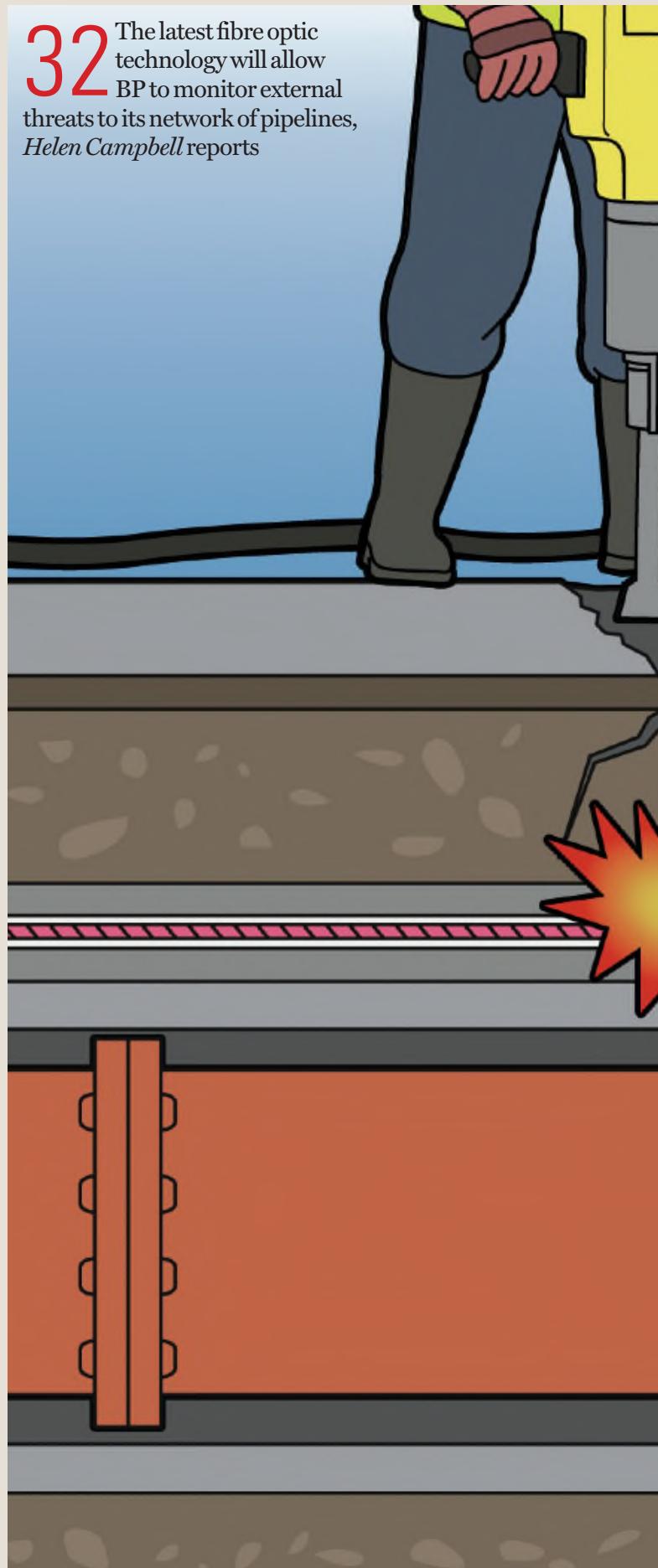
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Horizon is an international news magazine for BP employees, contractors and other interested parties. It is published eight times a year. The content does not necessarily reflect the company's viewpoint. Readers are free to disagree, particularly in letters to the editor. All submissions, including letters, may be edited for brevity, legality, accuracy and clarity.

Horizon is printed on Eural Super Silk paper that is made from 100% recycled fibre using de-inked pulp. No bleaching is used in the production of this paper.





## A new framework for success

**G**ROUP chief executive Tony Hayward's admission that in recent years BP has been a 'serial under-performer' was a brutally honest assessment of how the company sits in relation to its competitors.

His address at a gathering of the company's top 500 leaders in Phoenix in March, left managers in no doubt that BP had "promised a lot but not delivered very much".

Hayward's words still ringing in their ears, delegates were in no doubt that if BP is to close the current performance gap to its competitors, then it must implement the forward agenda, which was set out in October last year.

One part of that agenda is the new leadership framework. For BP's executive team, the new, single framework is key to making a sustainable change of

leadership behaviours across the company. Replacing a multitude of individual models previously operated across the group, the framework clarifies and defines the

behaviours required of BP's leaders and will, ultimately, help identify the leaders of the future.

The focus of the forward agenda is on restoring revenues, reducing complexities and changing behaviours—and is reflected in this edition of *Horizon*.

On page 10, Nick Reed examines the importance of changing the way the business is led from the top if the performance gap between BP and its competitors is to be closed.

One of the major forward agenda programmes already under way is in information technology and services (IT&S) and is discussed in detail in an interview with Dana Deasy, the new group vice president of the function, on page 20.

With the continued focus on safe and reliable operations, Paula Kolmar's insight into a 'safety first' mentality on the Na Kika platform in the Gulf of Mexico, on page 38, epitomizes the notion of 'silent running'—a team whose members talk to each other, things safely, and produce great results, without fanfare.

*Greg Goodale, Editor*



**20** Dana Deasy, group vice president of BP's group information technology and services function, on how restructuring will improve service



**38** Paula Kolmar reports on the safety and operations philosophies behind Na Kika, BP's most prolific Gulf of Mexico platform

### COVER STORY



**10** BP's leadership framework is key to closing the performance gap to the company's competitors, as Nick Reed reports

# In the papers

## Forward momentum

BP chief executive Tony Hayward has told shareholders the restructuring of the oil major should begin feeding into higher profits this year. Speaking at BP's annual general meeting, he said the firm was too bureaucratic and burdened by a higher cost base than rivals. But he assured investors BP was moving in the right direction. "There is forward momentum," he said. "What we have to do is make BP perform. That is what my team and I intend to do."

*Daily Telegraph*

The board said BP was moving back on track after a year of falling profits, management reshuffles and an under-performing share price. Peter Sutherland, the chairman entering his last 12 months in office, admitted performance in 2007 had not been good but rebuilding by new chief executive Tony Hayward meant BP was now "much better placed" and that the company is seeing forward momentum.

**Hayward accepted BP needed to "raise its game"** further but was optimistic that prioritizing safety, people and performance was paying dividends.

*The Guardian*

Late this year and into 2009, BP's bottom line should reflect efforts to **clean up problems and improve performance**. Last year, the firm knuckled down to address bloated staffing, delays in getting key projects pumping and output from refineries, including BP's Texas City plant where 15 people died in an explosion more than three years ago. Hayward also noted BP's problems hindered its ability to reap benefits of 2007's record oil prices and robust trading.

*Houston Chronicle*

## Piping in

ConocoPhillips and BP said on 8 April that they plan to jointly

develop a **\$30 billion natural gas pipeline** to ship Alaska North Slope gas to markets in the rest of the US. The proposed Denali pipeline, which would be the largest private sector construction project ever built in North America, would carry up to four billion cubic feet of gas a day. Starting this summer, the companies plan to spend \$600 million on preliminary design and field work with the goal of holding an open season for gas producers by the end of 2010. First gas could flow as soon as 2018, said Doug Suttles, president BP exploration Alaska. *Oil Daily*

TransCanada, which emerged earlier this year as the front-runner to bring Alaskan natural gas to market, now faces stiff competition as two of the world's largest oil companies have pledged to build a rival pipeline. **BP and ConocoPhillips** plan to start developing a new gas pipeline from Alaska through the Yukon and Northwest Territories to supply Canada and the US. The pipeline would have the capacity to supply about eight per cent of US daily consumption. *The Globe and Mail*

The team effort by BP and ConocoPhillips to build a long-envisioned natural gas pipeline from **Alaska's North Slope** has others in the industry wanting to play too. Enbridge, the number two pipeline company in Canada, says it too has discussed joining the 2,700-kilometre



(1,700 miles) pipeline project. "We want to be full equity partners—in the 10 to 20% range would be about right for us," said Ron Brintnell of Enbridge. Shell also may be interested in taking part in the project. *Houston Chronicle*

Named after the national park that houses North America's tallest peak, Mount McKinley, Denali could easily surpass the famed 1,300km (800 miles) Trans Alaska pipeline of the 1970s, in length and scope. Although record oil and natural gas prices have bulked up their balance sheets, oil majors and partners in the Denali venture, ConocoPhillips and BP face higher steel costs, stricter environmental laws, and a **mountain of regulatory challenges** rarely, if ever, seen in the 150-year history of the global oil business. *MarketWatch*

## Major defence

Executives from the five largest oil companies told the US Congress on 1 April that they weren't responsible for record gas prices and **defended the industry's record profits** for 2007. Executives from ExxonMobil, Shell, BP, Chevron and ConocoPhillips—which reported combined profits of \$123 billion last year—shifted blame for high prices to issues outside their control, including growth in global demand and government restrictions on US oil and natural gas resources. *Los Angeles Times*

Rising gasoline prices and flush profits are putting the oil industry on the political defensive in Washington DC, but industry executives gave little ground to hostile members of Congress or angry truckers on the road. Top oil company executives pushed back against attacks on their industry at a **congressional hearing**.



calling for the right to drill in off-limits areas and criticizing a proposal that would take away billions of dollars in tax breaks for oil to subsidize renewable energy technology. *Wall Street Journal*

The confrontation highlighted a **dilemma facing members of Congress and policy makers**. Calling on the oil industry to drop gasoline, diesel-fuel and heating-oil prices is popular with voters. Bob Malone (pictured), chairman of BP America, said that his company, like other oil producers, is already investing in renewable energy. BP is building 700 megawatts of wind power this year, and last year it blended 763 million gallons (2.9 billion litres) of ethanol with gasoline. But Malone said both renewable energy and traditional fossil fuels will be necessary to meet demand. *Wall Street Journal*

The US hearing came as the price of **regular unleaded gasoline** in the US hit a record high, according to the American Automobile Association. On 1 April, independent truck drivers staged protests around the country against the rising cost of diesel fuel, complaining that they cannot make a living when it costs more than \$1,000 to fill up their tanks. The oil companies said their record profits were aligned with other industries, noting oil and gas companies earned an average of 8.3 cents per dollar of sales, compared

with 7.8 cents per dollar for the Dow Jones average.  
*San Francisco Chronicle*

## Australia forward

The partners in Australia's North West Shelf joint venture have approved the development of the North Rankin 2 (NR2) project, operator Woodside Petroleum said on 31 March. Once the project is completed, the two platforms are to be operated as a single integrated facility. The addition of the fifth train will boost the North West Shelf's total liquefied natural gas (LNG) production capacity by 4.4 million metric tonnes per year to 16.3 million from late 2008. The six equal partners are BHP Billiton, BP, Chevron, Japan Australia LNG, Shell and Woodside. The venture produces about 40% of Australia's oil and gas.  
*Platts*

Woodside and its North West Shelf partners have agreed to spend around \$4.6 million on a third offshore production platform. NR2 will extend the life of the project, which began operating in 1986, at least until 2041. The legs for the new platform will be built in Indonesia and the topsides in South Korea. The NR2 project, including the platform, has been under detailed planning for about three years.  
*The Australian*

## Deepwater discovery

BP has chalked up what appears to be another respectable oil discovery in the deepwater Gulf of Mexico (GoM). "This discovery, in the vicinity of our 2003 Tubular Bells discovery, further strengthens BP's resource base in the GoM and has the potential to become an important new source of production for the US," said Andy Inglis, BP's top exploration and production executive. The



BP IMAGESHOP

new find, Kodiak, will be operated by BP with a 63.75% working interest. Italy's ENI holds a 25% stake while Japan's Marubeni Oil & Gas has 11.25%.  
*Oil Daily*

BP's discovery **Kodiak**, near its Tubular Bells find in the deepwater GoM, could result in the development of both resources. The probe was deviated with a horizontal step-out of 2,200 metres (7,400 feet). The find is in a hub-rich area of the GoM. BP said further appraisal will be required to determine the size and commerciality of the find.  
*Upstream*

## Azerbaijan accelerates

BP is planning to increase the capacity of the Baku-Tbilisi-Ceyhan (BTC) oil pipeline by 20% from the current 1 million barrels a day (b/d) to 1.2 million by the end of this year, with a further capacity increase under consideration, the BTC Pipeline Company said. The increase is to be achieved by the use of drag reducing agents, which will be injected into the line at three points.  
*Platts*

The BP-led BTC pipeline targets an increase in capacity to 1.2 million b/d in 2008 and will start to use that capacity level from next year, BTC Turkey manager Can Suphi said. He also said one million b/d would flow by the end of this year. Currently,

875,000 b/d is flowing through the pipeline. Suphi said capacity for the pipeline, opened in 2006, could rise to 1.6 million b/d by 2012 to 2013.  
*Reuters*

BP and partners will expand the capacity of their South Caucasus Pipeline from Azerbaijan to Turkey by 20% next year, the pipeline's Turkish manager said. BP is currently pumping about 875,000 barrels of crude a day to the Turkish Mediterranean port of Ceyhan. **BP will invest in storage and loading facilities** to meet the additional capacity. There are currently no plans to ship Russian, Kazakh or Iranian gas through the pipeline, he said.  
*Bloomberg*

Oil has been discovered at the **offshore Inam structure**. The log data analysis tapped the oil-bearing reservoir of ten metres in thickness. The rock is composed of feldspar with high content of clay, the source added. BP Azerbaijan began drilling the INX-2 exploration well at Inam in November 2007. BP, with a 25% share, is the operator in the Inam production-sharing agreement, which includes Socar 50%, Knoc 20% and Shell five per cent.  
*Azer-Press*

## Refinery progress

BP is partnering with Irving Oil to bring a second oil refinery to Saint John, New Brunswick, Canada. BP and the family-owned firm are working on a \$80 million engineering, design and feasibility study of the proposed **\$7 billion, 300,000 barrels-a-day Eider Rock refinery**. Randy McLeod, president and chief executive officer of BP Canada, said his company was excited about the partnership.  
*Telegraph Journal*

Local officials are so enthusiastic about Irving Oil's latest business partner, you would think its

initials stood for '**Big Payday**'. Saint John mayor Norm McFarlane said: "To think little old Saint John is thought of on the world stage is fantastic." He believes a strong business partner such as BP boosts the chances of success of a new refinery, and will create new jobs.  
*Business Telegraph Journal*

The feasibility study, along with an environmental study and other work, **will cost more than \$100 million**. Irving Oil and BP are also investigating the possibility of forming a joint venture to build the refinery, should they decide to proceed with it. A decision on construction is expected in 2009.  
*Bloomberg News*

While BP has long maintained a natural gas presence in Canada, it shed most of its oil assets in the country under the former chief executive officer John Browne. The Irving Oil deal should be considered part of BP's attempts to 'fill a hole' in its **North American energy**, said Joseph Stanislaw, adviser to both BP and Irving Oil.  
*Globe and Mail*

The Eider Rock refinery would produce 300,000 barrels a day of refined products, all for export to the US. It would create around **5,000 temporary and 1,000 permanent jobs**, and is expected to be completed by 2015.  
*US Northeast*



JUPITER IMAGES

## LETTERS

**LETTER OF THE MONTH** I (and the Norwegian royal family, I guess) were a bit surprised to learn that Norway is a republic formed on 26 January 1950 as stated in the April 2008 issue of *Horizon* ('Our friend in the north'). This date is probably more familiar to your Indian readers. Norway is a constitutional monarchy formed in 1905 when it separated from the union with Sweden.

**Jan Erik Kittilsen,**  
exploration team leader,  
Stavanger, Norway

**Editor writes:** Thank you for your letter and pointing out our error. Unfortunately, due to unforeseen magazine production circumstances, we overlooked this and other inaccuracies in the article. *Horizon* would also like to point out the correct name of the development marked on the map is Ormen Lange, and to apologize for any inconvenience caused.

I have just finished reading the 'Commended photographs revealed' article about the *Horizon* 2007 photo competition (*Horizon*, April 2008). Could you please advise me if there is going to be a 2008 photo competition, and when the details will be published?

**Chelsea Neumann,** Castrol,  
Brisbane, Australia

**Editor writes:** Thank you for your letter—we're glad to hear you enjoyed looking at the fantastic entries the competition received last year. Rest assured there will be another *Horizon* photo competition in 2008, and you can read all about how to enter, the categories for submissions, and the judging process in the July edition of the magazine.

Send letters to: *Horizon*, BP,  
Chertsey Road, Sunbury-On-Thames,  
Middlesex, TW16 7LN, United  
Kingdom, or by email to:  
[horizon@bp.com](mailto:horizon@bp.com)

## Rock partnership looks to boost US refining

BP AND regional refiner and marketer Irving Oil will work together on the next phase of engineering, design and feasibility for the proposed Eider Rock refinery in Saint John, New Brunswick, Canada.

BP will contribute \$40 million as its share of funding for this stage of the study and the two companies will also investigate the possibility of forming a joint venture to build the refinery should they decide to proceed.

"This refinery project is of great interest to BP because of its ideal location close to the markets of the northeastern US where product supplies are increasingly in deficit," said Iain Conn, chief executive of BP's refining and marketing business. "BP is keen to develop projects which enhance the energy security of Canada and the US. Irving Oil has a well-deserved leading reputation in refining for the east coast."

Irving Oil conducted initial feasibility work and informal public consultation in 2006, and has been engaged since January 2007 in permitting, public consultation, and engineering design for the proposed 300,000

barrels-a-day refinery.

The refinery would be situated close to Irving Oil's existing 300,000 barrels-a-day refinery and the existing Irving Canaport deepwater crude oil terminal which receives very large crude carriers' oil cargoes and is located 105km (65 miles) from the US border.

This next phase of engineering, design and feasibility work, combined with

ongoing permitting and community engagement activities, represents more than \$100 million of investment over the next 15 months.

A final investment decision is not expected before 2009 and, although the final costings will only be clear once all the detailed engineering and design work is completed, the refinery is expected to cost at least \$7 billion. ■



## Carbon Calculator leaves footprint in China

BP HAS won high praise from the children of China after backing them to increase energy efficiency and reduce carbon emissions.

As part of a campaign to take greater care of the environment, the Chinese government asked its people to look at ways they could actively reduce their carbon footprint.

BP launched its Carbon Calculator, an interactive tool to help people calculate their carbon footprint, last year in China. And students at the Youth Centre of Shanghai Xuhui

district have since used the software to calculate their household emissions and exchange energy saving tips.

The tool has attracted an increasing number of schools and students. Since its launch, more than 30,000 students from 51 schools have used the Carbon Calculator to establish their carbon footprints and find ways to reduce them.

"We are proud of these achievements and we are so grateful to BP, which granted us the right to use their Carbon Calculator for free," said Ye Ying,

deputy director of Shanghai Xuhui Youth Centre.

"We will continue to track our carbon footprints along the green curves to reach greater achievements."

Following the students' initial carbon measurements, the centre offered workshops and seminars to exchange energy efficiency experiences among schools, students and their parents.

The 'greenest' schools were also given awards as part of the innovative knowledge-sharing programme. ■

# \$600 million to kick-start Alaska gas pipeline

BP AND ConocoPhillips have agreed an initial \$600 million deal to start-up the Alaska gas pipeline.

The pair will invest the cash in the pipeline, coined Denali, which will move around four billion cubic feet of natural gas a day to North American markets, to reach an open season—a process during which a pipeline company seeks customers to make long-term transportation commitments—by the end of 2010.

BP and ConocoPhillips then intend to get federal approval and the green light from the US National Energy Board to press ahead with construction.

Tony Hayward, BP group chief executive, said of what will be the largest private sector construction project ever in North America: "This project is vital for North American energy consumers and for the future of the Alaska oil and gas industry. It will allow us to keep our North Slope fields in production for another 50 years. The Alaska gas pipeline will be a historic moment and we are pleased to be working with ConocoPhillips to move it forward."

The project will consist of a gas treatment plant on the North Slope and a large-diameter pipeline that will travel through Alaska and into Canada through the Yukon Territory and British Columbia to Alberta, and onward to the lower 48 states of the US.

BP and ConocoPhillips will now look for other equity partners, including various pipeline companies, who can add value to the project and help manage risks. ■

# US refineries focused on forward agenda

**IMPORTANT MILESTONES** have been reached at the Texas City and Whiting refineries, in line with BP's forward agenda.

At Texas City, a second pipestill was safely and successfully commissioned, adding more than 180,000 barrels of oil a day (b/d) in production, taking the refinery near 400,000 b/d, with full value production of 460,000 b/d expected later in the year.

In 2007 more than 18 million worker hours were dedicated to the renewal of the refinery, resulting in the successful recom-

missioning of seven process units, including a completely renovated catalytic cracker and increased gasoline yield.

In safety efforts, it eliminated blow-down stacks in light hydrocarbon service, commissioned new relief systems including flares, and invested more than 287,000 hours in training.

The refinery continues to make environmental improvements and, to help ensure compliance, is nearing completion of an unprecedented, comprehensive environmental assessment.

The plant reduced its overall air emissions by 22%, as included in the latest federal reporting.

At Whiting, the full heavy and sour crude processing flexibility of the plant has been restored. Available distillation capacity now exceeds 350,000 barrels of oil a day.

Work has been focused on returning operations and restarting critical units, and plans include upgrading the refinery to process more heavy Canadian crude through a multi-billion dollar investment. ■

# Sutherland is assured by fresh momentum

BP'S FUTURE and the forward agenda formed key themes at the company's 99th annual general meeting held in London in April.

Chairman Peter Sutherland spoke of the momentum being created by chief executive Tony Hayward and his team to ensure maximum benefit is achieved from the "great assets and great strategic positions that have been created over the years".

Sutherland said: "There has been change within the company—Tony's focus on the forward agenda will ensure that the company is 'match fit' to face the coming challenges from a market which is coming to terms with the realities of a high oil price."

In his speech to shareholders, Hayward said: "When it comes to performance, missing revenues are being progressively restored and we're taking action to reduce complexity."

He then spoke of upstream growth in exploration and production, the turnaround of the downstream business, corporate simplification, and realizing value for shareholders in alternative energy.

Hayward described the forward agenda as a way of simplifying BP and fundamentally



BP IMAGE SHOP

BP chairman Peter Sutherland said the company's forward agenda will ensure it is 'match fit' to face the challenges high oil prices bring

changing the company culture and its way of operating.

He said: "I believe we have a compelling medium-term strategy. But my confidence in the future is based on more than the near term outlook. I fundamentally believe in this business and in BP."

In conclusion, Hayward said: "One of the advantages of having a long history is that you can get a sense of perspective. Every decade or so, BP has had to reinvent itself. That was the case

when we lost our assets in the Middle East, when we moved back to Alaska and the North Sea in the 1970s and then again in the late 1990s when we created the modern BP. We are in the midst of one of those periods now.

"This company has a vital role to play in the next one hundred years, just as it did in the previous one hundred. There is no doubt about that. What we have to do right now is make BP perform. And that is what my team and I intend to do." ■

## LETTERS

I have just found your online version as a result of wanting to forward an article to a colleague. I know every person at BP locations receives a hard copy of *Horizon* and many, if not most, unfortunately find their way into the garbage. I would like to say this is not out of disrespect to the content and effort but more for the perspective that we have too much paper and little time to digest the material. Could we rely from the most part on the electronic version and limit the hard copy distribution as part of the green initiatives?

**Bill Maji, lead mid-tier support engineer, Warrenville, Illinois, US**

To further reduce the environmental impact, I suggest *Horizon* be mailed without the plastic wrap to those that choose to receive the print version. Thousands of kilograms of plastic are filling landfills every year. I did not receive the postcard asking me to confirm continued interest in receiving the print version, as mentioned in the April 2008 issue. Today, I will email BP distribution services to have them cancel my print version, and I would suggest others that have internet service do likewise.

**Dave Thompson, retiree, Calgary, Canada**

**Editor writes: Thank you both for your letters. *Horizon* takes its environmental footprint extremely seriously and in the last year we have taken a number of major steps to reduce it. These measures have included printing the magazine on fully recycled paper made from de-inked pulp and reducing the magazine's distribution by around 40%. As you mention, an online version of the magazine is available to all readers at [www.bp.com/horizon](http://www.bp.com/horizon) and to current employees at [http://horizononline.bpweb\(bp\).com/global](http://horizononline.bpweb(bp).com/global).**

## Global headquarters gets top marks for safety

BP'S HEADQUARTERS in St James's Square, London, has been awarded a five star rating for health and safety, performance from the British Safety Council.

The annual audit reviewed management of health and safety through to the implementation of associated systems in the workplace to arrive at an overall numerical score. This year the BP building scored 95.9% compared to 93.6% in 2007, giving the company's headquarters the top award for safety for the second year running.

The British Safety Council's Five Star Health and Safety Management System Audit is

about measuring best practice and ensuring organisations meet the highest standards in health and safety.

It provides a focus for a positive health and safety culture within an organization, setting realistic objectives and proving to employees and customers a commitment to best practice and continuous improvement.

The audit examines risk control measures and seeks evidence of a strong safety culture by measuring separate health and safety criteria divided into five key areas of focus: safety organization, management systems, fire control systems,

measurement and control systems, and workplace implementation.

The report commended "the enthusiasm and strength of leadership demonstrated by senior managers and attested to by middle managers within the BP organization".

Mark Bly, group vice president of safety, operations and integrity, said: "This is a complement to our supply partners, including Johnson Controls and Aramark.

"It is also an encouragement to keep working together with renewed focus on the St James's Square office safety to become a zero-incident workplace." ■

## Mountain project peaks with ecology award

BP GEORGIA has announced the project winner of its sixth annual biodiversity competition.

'Eco trail and the green gate of Mount Mkinvartsveri' was picked by the judges for its promotion of eco-tourism in the country.

The main aim of the project, which was submitted by the non-governmental organization (NGO) Kazbegi Mountain Tourism House, is to promote eco-tourism, establish a professional guide service, develop information boards in the area, and raise awareness in the local community to protect

biodiversity and further develop eco-tourism. As winner, the project received \$17,850 on behalf of BP and its co-venturers in Georgia.

The competition was divided into two main categories—the best biodiversity project and the best biodiversity article and video material. The first category included topics like critical ecological systems and the protection of endangered species, and carried a total prize budget of \$25,000. The second category, which is designed to reward print and television journalists for their work in

promoting biodiversity, and aims to promote environmental journalism in Georgia, had a total budget of \$1,000.

Emzar Diasanidze won the best biodiversity article category for his story 'Spagnum: A new source of wealth', which was published in the *Batumeli* newspaper.

BP Georgia and its partners have contributed in a variety of ways to enhance local biodiversity. To date, three projects have been completed, with another three ongoing as part of a \$3 million environmental investment programme. The projects include: management of a small grants programme for NGO capability-building along the Baku-Tbilisi-Ceyhan and South Caucasus pipeline routes; management plan for Ktsia-Tabatskuri managed reserve; Caucasian black grouse research, monitoring and conservation management project; the enhancement of environmental education; and conflict prevention through youth awareness. ■



BP Georgia is working on a number of biodiversity projects

# A million reasons for cross-function design

A CROSS-FUNCTIONAL business team has set itself a demanding efficiency test—to develop a prototype design for a retail gas station and ampm convenience site that would cost a million dollars less than the average build cost.

The 'million dollar challenge' started when the team—which comprised members from US convenience retail (USCR), US fuels marketing, and brand, marketing and innovation (BMI)—benchmarked regional and national competitors and found the average cost of a new-to-industry site was between \$1.9 million and \$2.9 million. With USCR's costs higher than the upper limit of the range, the challenge was on to build the site more efficiently without compromising quality.

The team, which focused on the three key areas of construction, fuel offer and convenience offer, was lead by Joe Bookout, vice president of asset management, and Mark Murgash, design implementation manager.

Bookout said: "We challenged



A new lay-out of fuel pumps is one of the features of the new design

the team to embrace simplicity. We asked them to be bold and to expedite the decision-making process. In fact, most decisions were made right on the spot, and the few that did require additional information or prototyping were landed in a matter of days, not weeks."

Approved changes to previous designs include centering fuel tanks under the canopy and

optimizing tank size with five pumps in a single row instead of four pumps in two rows.

The revamped site will be capable of delivering the high volume of sales ampm is accustomed to, as well as fuel sales in line with ARCO and BP targets. The team anticipates the first site to incorporate the new design will be open for business next year. ■

PAST TIMES MAY 1928

## A punchy slogan for the 'roaring' 20s

It's 1928, the year when the first regular television programming began in the US, Alexander Fleming revolutionized medicine with his discovery of penicillin, and it was 20 years since the first oil strike by the Anglo-Persian Oil Company in Persia.

NAFT, the Anglo-Persian Oil Company's magazine, reports on a high-profile event at London's Savoy hotel that received ample attention from the press. No, it's not a state visit from newly-elected US president Herbert Hoover, rather the award ceremony of the BP slogan competition.

The prize for the best slogan is a

whopping £500, or around \$30,000 in today's money, which might explain the impressive 115,000 entries received even though, NAFT writes, the competition was only advertised in the press for one day.

The winning slogan 'The petrol that pulls with a punch'—reflecting the aggressive, male-oriented nature of fuels marketing in the 'roaring' 20s—came from Lieutenant Grant, serving on the battleship Royal Oak, whose prize was accepted on his behalf by Massaic Buist, editor of Autocar magazine. Tragically, the Royal Oak was torpedoed 11 years later while anchored in Scotland, killing 833 of its 1,234 crew.



The winning slogan presentation party in May 1928

All the prizes were presented by Hubert Heath Eves, an early managing director of the Anglo-Persian Oil Company.

In second place was the equally punchy offering 'You can't improve on

## TNK-BP joins Russian culture club

TNK-BP HAS won a top award for promoting Russian culture in Europe.

Named the top business contributor to strengthening cultural, scientific and business relations between Russia and Europe, the firm was awarded the Moscow European Prize at a ceremony in March at the capital's Pushkin State Museum of Fine Arts.

The prize is awarded to people working in different industry fields making sizeable contributions to the creation of a positive image of Russia in Europe.

Vladimir Koptev-Dvornikov of the Moscow European Club, a co-founder of the awards, said prizes were given for "promotion of peace, cross-pollination of cultures, and communication of people" and that as well as "promoting a healthy business climate, the creators spotlighted popularization of European values in Russia". ■

Strong leadership is crucial to the success of the transformation that will enable BP to close the performance gap on its competitors. That was the key message of the March meeting of senior leaders in Phoenix and the company's new leadership framework

# Behavioural change is key to forward agenda

**I**F THERE was one phrase that resonated around the room more than any other at last month's group leader meeting in Phoenix, US, it was "culture eats strategy for breakfast".

The phrase, coined by Ford executive Mark Fields, was quoted by Paul Waterman, regional vice president, lubricants Americas, to underscore the importance of cultural change to BP's future success. If the company is serious about achieving the sustainable change that is at the heart of the forward agenda then the way it is led must change too.

"Unless we change the way we lead the company, nothing will actually change," was the simple message from Andy Inglis, chief executive, exploration and production (E&P), when he and Vivienne Cox, chief executive of Alternative Energy, introduced BP's new leadership framework to 500 group leaders at the meeting.

Group chief executive Tony Hayward has talked of the importance of addressing leadership behaviours in his forward agenda announcements last October and in townhalls at BP operations around the world—the evolution of those statements is the new leadership framework which takes its place at the heart of the forward agenda.

The executive team has spent considerable time in the past few months thinking about leader-

ship across BP: the sort of people that should be leaders; the behaviours they should be demonstrating; and the culture that needs to be built. The result is a single new leadership framework, which replaces the number of different models previously used around the group.

Fully endorsed and now owned by the executive team and all group leaders, the leadership framework is built around the expectation that leaders will: value expertise, energize people, act decisively and deliver results.

"The framework includes many things that have been BP strengths in the past, but there is also a lot that is new," Cox said. "As an organization we have never really concentrated on expertise, for example, and particularly depth of expertise within the business."

"Running Alternative Energy, I've come to understand that I need to hire people who are deeply specialized in many different areas of energy. This links into 'energize people', too. As we bring in new people from different organizations, people who come with different skills, we have to respect their opinion, value their expertise and energize them."

"If you've got energized people who have a passion for what they're doing, then so much more becomes possible."

Inglis pointed to the example of Stan Bond, a project manager responsible for bringing the

**'If you've got energized people who have a passion for what they do, so much more becomes possible.'**

Vivienne Cox

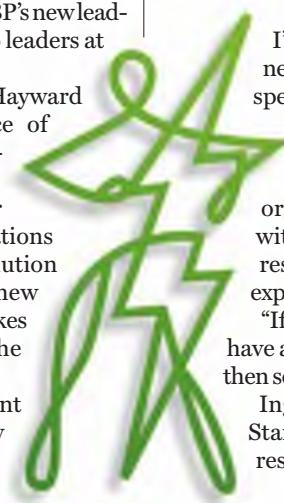
Thunder Horse deepwater Gulf of Mexico facility online. "He's deeply experienced at this," Inglis explained. "We've lifted sub sea kit from the depths of 5,000 feet [1,500 metres], kit that was never previously going to see the light of day, pulled it up to the surface, repaired and reassembled parts and lowered it down again."

"No-one has ever done this before, and it wouldn't have happened without Stan's skills and leadership."

The new emphasis put on listening in the organization, as well as on the giving and receiving of honest feedback, is also fundamental to the new BP, Inglis explained. "You can't make a difference if what you're doing, what you're saying, isn't being heard," he said. "Giving and receiving honest feedback is tougher. We've just been through a round of appraisals in upstream, and actually it's been tough for me as I've decided I'm going to be very direct and give honest feedback."

Cox added: "I know I've ducked giving honest feedback before, but when you actually do it, it makes a difference in terms of performance. And if you do it well, people accept it."

One of the other presenters at Phoenix, ▶



The BP leadership framework places four expectations on leaders: value expertise, energize people, act decisively and deliver results



## Forward agenda programmes under way

At the March Phoenix leadership meeting, senior leaders heard about some of the major forward agenda programmes already making an impact across BP

### Fuels value chains

The BP fuels business has made a bold strategic move through the creation of seven regional fuels value chains (FVC) which brings together refining, trading, supply, logistics and marketing operations under a single regional strategy, a single FVC leader and joined-up governance for the first time. This new business model allows for far greater integration of decision making, performance management and business interfaces as each part of the value chain now works towards shared goals and objectives. This business transformation will unlock large-scale simplification through more effective strategic and resource allocation, removal of duplication, more aligned and flexible regional decision making, improved business behaviours, and in turn, the ability to have greater external focus on regional competition.

### Finance

A major transformation is under way aimed at reducing the duplication associated with BP's heritage organizations. This will result in a significant reduction in headcount and less complexity, but the levels of service offered to the business will not be compromised as a result. While demand will be reduced, efficiency will be increased on a sustainable basis. The result will be a finance function that provides managers with what they need to run the businesses in respect of planning or investment appraisal or commercial operations or activities, but with fewer people in the business-facing organizations.

#### As a BP leader, I:

- Value expectations**
  - Apply business rigour and judgement
  - Command respect for professional excellence
  - Generate intent for the enterprise
  - Develop capability through continual learning

#### Engage people

- Build value and incentive systems for success
- Foster a扁平化组织, with self-reliant and accountable teams
- Listen for and integrate different perspectives
- Give and receive honest feedback

### Information technology and services

Initiation of the Four Rs programme—Rewiring information technology and services (IT&S), Retooling the function, Re-engineering it and setting it up for better sourcing strategies for Resourcing. Centralization of IT&S aims to get rid of duplication of work and to help achieve economies of scale. An assessment of IT&S leadership is already complete, and will continue at all employee levels. Re-engineering of processes also under way to eliminate waste, redundancy and reduce the number of systems used to run the company.

### Gulf of Mexico

The Gulf of Mexico (GoM) team has started the year well. The Atlantis platform, which started up in the fourth quarter of last year, continues to perform ahead of plan with an operating efficiency of 94%. The team is making good progress on the Thunder Horse platform which remains on track to start-up before the end of 2008. The GoM strategic performance unit completed its restructuring in the first quarter of this year, removing between one and two management layers and increasing the average span of control from five to seven layers. In addition, the drilling and completions and sub sea organizations have been centralized to drive standardization and leverage scarce resources.

### Texas City refinery

The past two years have seen tremendous efforts to fully restore the Texas City refinery with a reduced risk profile, and those efforts are being accelerated in 2008. Investment is not only being made in the facilities, to provide a foundation for the integrity of the assets, but also in the human capability around those assets—including the personal and process safety cultures. Last year's safe start-up of seven major processing units has recently been followed by the start-up of the large sour crude train, with two trains of the residual hydrotreater unit (RHU) to follow. The plant is also preparing to recommission the Alkylation unit—the largest HF Alkylation unit in the world; the rebuilding of the UU3 reformer, the 120,000-barrel-a-day catalytic cracker, and the third train of the RHU, are in progress, all of which is expected to bring the plant back to full margin capability.

### North America gas

North America gas (NAG) has completed a major review of its overhead structure to simplify how work gets done. In addition, decision rights in key areas have been mapped to clarify what decisions need to be made and who is accountable. As a result, both complexity and headcount have been reduced; the strategic performance unit has taken out a general management layer—NAG now has just six operations managers directly controlling its 20,000 wells and 20,000 miles of pipeline.

#### Deliver values

- Manage risk and drive safe, reliable and efficient operations
- Standardize, simplify and reduce complexity
- Drive continuous improvement
- Manage performance rigorously and hold others to account
- Execute against demanding competitive benchmarks

Leading the BP way

The new leadership framework comes in the form of a concise pocket-sized booklet

### Integrated supply and trading

IST's dramatic growth between 2001 and 2006 doubled the size of its gross margin, but also doubled the size of the organization and its cost base over the same period of time. The past two years have been spent stabilizing the business around organization governance, compliance, reward, systems, trading supervision and distinctive performance, and the focus now is on simplification. Activities are underway to change the business model in the front, middle and back office operations; deploying new systems and removing overlaps and duplication. A lot of effort is going into greater rigour and discipline in the spending programmes—particularly in IT systems investment and discretionary spending on consulting, travel and entertainment.

► Keith Casey, business unit leader at Texas City refinery, was singled out as someone who acts decisively, leading a team that is getting a business back on its feet while juggling a demanding set of priorities.

"It's very easy to set your priorities, but actually taking tough decisions and seeing them through is the hard part," Inglis said. "That's what Keith is doing."

Cox made the point that Acting Decisively means doing what's best "not for my business,

not for my strategic performance unit, but actually for BP." It was a theme taken up by Iain Conn, chief executive of refining and marketing.

"It is deeply important to understand that if we don't have a behaviour of collaboration, with all of us pulling in the same direction, we will fail," he said.

Delivering Results would appear to be a self-evident component of any leadership behaviours, but its appearance in the new framework is something of a departure for BP.

Two areas are particularly new to the organization.

"Continuous improvement is a big shift from where we've been in the past," said Cox. "It's not about the big steps, the big deals. It's about the continual development of the business."

"Competitive benchmarking is also vital," she added. "One of my frustrations about BP is that I spend all my time internally focused, when it's the people outside that we're trying to beat. What energizes me is knowing where we sit competitively, being honest about it, and then working out how to beat the competition."

Group leaders have been asked to take the new leadership framework back to their own parts of the business and roll it out through their teams as a matter of urgency. The aim is to embed the framework in all key people processes during the course of 2008—assessment and recruitment, performance management and reward, talent management, and leadership development.

"The executive team discussed at length whether this should be an enduring framework that would last for the next 10 or 15 years, or whether it should be more short term to see us through this particular period of great change," said Inglis. "Having looked at the best practice in other organizations, the consensus view is that we should review the framework after three or four years, so that we can shift things according to where we are then." ■

# Closing the performance gap

BP has been a 'serial under-performer' for the past few years, group chief executive Tony Hayward told the Phoenix meeting. But early progress with the new forward agenda indicates that this situation is set to change

"WE KNOW what we need to do—now we need to get on and deliver. Every dollar counts. Every seat counts. And we need to act now."

This was group chief executive Tony Hayward's message to group leaders at Phoenix last month. He said also that BP had "promised a lot and not delivered very much" for several years, but pledged that the effective and rapid implementation of the forward agenda would help BP by restoring revenues, tackling complexity and changing behaviours. As a result, it is expected that the company will demonstrate significant business and financial momentum in the course of 2008 and 2009, creating a platform to deliver sustained performance in the longer term.

Hayward pointed to the implementation of the new operating management system, and expansion initiatives to build operating capability such as the projects academy, as highlights of progress supported by established programmes. Changes to the integrated supply and trading function and the North America

gas strategic performance unit, as well as the creation of fuels value chains and significant transformations in the finance and digital communications technology functions, not to mention significant recent cuts in senior management, demonstrate that major activities to reduce complexity are already advancing. And the process of restoring revenues is under way thanks to upstream and downstream assets coming online (see panel on page 11).

So how does all this come together to begin to close the performance gap between BP and its competitors? "Broadly speaking there are a couple of billion dollars with refineries such as Whiting and Texas City coming back to full capacity, a couple of billion more with 200,000 barrels a day of new production when Thunder Horse and Atlantis and a whole raft of other projects start up, and three to four billion dollars from cost savings," Hayward said.

The urgency of the challenge was reflected by the external guest speaker Neil Perry, oil and gas analyst at US investment bank Morgan Stanley, who explained at length the financial markets' view of BP's recent under-performance. Against a background of fundamental industry change, he said, BP has failed consistently on upstream project delivery and downstream reliability. He added, however, that the organization was "sitting on a goldmine" of assets that could help it close the gap on competitors.

"There are three things you need to do," he said. "One: recognize where you are. Two: respond by defining your role and closing the gap in operating performance with the competition. And thirdly: above all, do what you say you're going to do." Success in each area would see the trust of the market return very swiftly. "The market wants control, and it wants a logic for growth," he concluded.

And the penalty for failure? "Very simple," he said. "BP will not exist in four to five years time in its current form." ■



SINCE THE fire and explosion at Texas City refinery three years ago a great deal has changed and safety performance in BP has continued to improve. But there is more to do. The independent panel of safety experts headed by former US Secretary of State James Baker assessed the safety management systems at BP's five US refineries and the company's corporate safety culture. They challenged BP to become industry leaders in process safety and advised that improvements should be led from the top.

"The time and effort invested by our executive management in leading the safety and operations agenda has been crucial in moving us forward," says Steve Flynn, BP's vice president of health, safety, security and environment. "A good example is the formation of the group operations risk committee [GORC]. Here group chief executive Tony Hayward, together with the chief executive of each of the segments, the group vice president of safety and operations [S&O] and the group head of engineering, come together for several hours each month to review performance, progress and future plans." Executives are also spending more time in the business and are leading by example—for instance, by attending BP's operations academy.

"Since the Baker panel report, progress has been ongoing against each of the panel's recommendations," says Flynn. "The highest priority items for operations are set out in a six point plan which deals with the most immediate issues. This has seen the removal of hundreds of temporary buildings from potentially hazardous areas. It has also closed many outstanding actions from past audits thanks to a huge effort by our operations teams and engineers."

Plans have been developed to tackle risks on a prioritized basis, involving activities such as new buildings and pipeline replacement. "Our operations teams are looking to improve business as well as safety as they progress their plans," Flynn adds.

A good example is the Wytch Farm oil field in the UK. Here, the six point plan focused attention on replacing part of a pipeline system which runs through an area of environmental significance. It also highlighted the need to update many of the existing buildings on the site. To ensure the greatest business value, changes were reviewed in line with the latest best practice in operations management. The completion of a new control room and replacement control system for example, has created a new and modern facility which is expected to increase production by three per cent per year.

# Taking the bull by the horns

It's the number one priority in BP's forward agenda, so how is the company progressing on its journey towards safe and reliable operations?



At the heart of these changes is a renewed emphasis on process safety. "At its most basic, process safety is all about keeping our products in the pipelines where they belong," explains Deb Grubbe, vice president for process safety in refining and marketing. "Although this may seem obvious, everyone has a part to play—employees and contractors—as well as management and supporting functions. Getting this right is fundamental to virtually everything we do."

The S&O function has been a key enabler of change over the past three years. S&O brings together technical functions like engineering and health, safety, security and environment, and also includes an independent audit group. The audit group is now about 80 people



strong and has a systematic three-year programme covering BP's key sites. Where needs are identified, a corrective action plan is agreed with the site, and overall progress on action closure is reviewed by executive management and the BP Board. "We seek formal independent feedback from each of the business units at the end of an audit," says Jim O'Brien, vice president of S&O audit.

"Overall we have received a rating of 4.2 out of a possible maximum score of 5.0. Although this is positive, we continue to evaluate every opportunity to improve," O'Brien explains. "While rigorous and comprehensive, we are striving to integrate good auditing as part of the fabric of sustainable safe, reliable and efficient operations. And the businesses agree. It is better to detect gaps and put plans in place to reduce the risk than to deal with the consequences of leaving a risk insufficiently managed."

While there has been an initial focus on group-wide standards and systems, the longer-term goal is to build BP's safety and operations capability at the local level. The operating management system is a core element of BP's forward agenda, providing a consistent 'BP way' of managing operating risks



and driving continuous improvement at the local site level. Building the required safety and operations capability has resulted in the introduction of an operations academy and also the operating essentials (OE) programme for front line leaders. This has been piloted at a number of sites (see sidebar). "I think we have taken the bull by the horns," says Paul Arnold, safety representative at Kwinana refinery, Australia, one of the pilot sites for the safety programme. "People walking in can see we are addressing the safety and operations issues," adds Thys Heyns, Kwinana strategic performance unit leader. "These are things our people recognize as important and want to get right."

Those working to improve safety are clear about the benefits. Eric Jacobsen, offshore installation manager and Azerbaijan operating essentials representative, previously worked on an operating essentials pilot programme in Angola. "My advice for other sites, based on our experience in Angola, is to introduce operating essentials as soon as possible," says Jacobsen. "The benefits surprised a lot of people. Importantly, support from the senior leadership team means that people know this is a change in behaviour and ways of working that is here to stay." ■

## TRAINING FOR SAFER OPERATIONS

ONE OF the key factors in changing behaviour and creating a culture of safety is engaging employees at all levels. BP has started three programmes to build operations capability and support the implementation of the operating management system (OMS). The largest one, operating essentials (OE), is aimed at first level leaders. According to Thys Heyns, Kwinana strategic performance unit leader, OE has allowed a safety dialogue to develop and resulted in the setting up of forums across functional and hierarchical boundaries, allowing employees to talk about issues independently of their line manager. "It is amazing what we can get out of these discussions," he says.

The overall programme aims to bring OMS to life. "OE is more than just a training programme," says Urbain Bruyere, OE project manager. "It operates like a site intervention. The implementation team works with the site management team to implement the programme in a way that supports the delivery of the site's objectives."

"The idea behind this is about bringing the reality of the operation into the discussion and delivering a programme that will assist the site," says Bruyere. "This is about creating a catalyst for site improvement."

BP has long had a health, safety and environment (HSE) management system called 'getting HSE right'. Although this has worked well for environmental safety and behavioural safety performance, when attempting to implement process safety the going has been tough. BP therefore took the decision to spend 18 months re-engineering and redesigning that system, creating the OMS and the associated capability programmes.

The OMS will be embedded with the support of these programmes: OE; the operations academy, a partnership between BP and the Massachusetts Institute of Technology (MIT) targeted at site leaders; and the executive operations programme, which is also delivered in partnership with MIT.

Although the learning is designed to target three different audiences, each is designed to support the other. In previous training programmes the target audience might have been chosen in isolation to other areas of the business. However, in order to create the necessary improvement in safety and operations performance, programme participants need the support of management to give them the ability to put what they have learned into practice. These three development programmes are therefore being implemented in parallel across all levels in order to provide alignment and create the momentum for improvement. The initial target for OE is to get a total of 650 first level leaders started on the programme in 2008.

"OE is about building operating capacity at the front line," Bruyere says. "OE is aimed at first and second level leaders or supervisors, and is focused on exploration and production sites, and refineries and chemical sites."

OE consists of a suite of modules that covers both people and technical skills. The programme consists of up to 12 days in the classroom together with up to 24 hours of online learning. It is expected that a typical site will take two years to go through most of the modules. Roll out of the programme is being prioritized at each site depending on the local challenges and the previous training of those working there, meaning the programme is aligned with the site's priorities.

An example of this occurred in Angola, where the programme included a multicultural operations module focusing on the importance of getting the most from a diverse operations team. This helped the individuals identify the working culture they want to create and the general behaviours that need to change to get there, along with the top three behaviours that would make the biggest impact on safety and work practices.

One part of OE that has resonated with those attending the training is its momentum. "There is a real understanding that if we are going to do it then we are going to do it right," says Tanya Newton, safety representative at BP's Kwinana operation. "The site is really changing and nobody can say that we are in the same place that we were 12 months ago."

However, attending the programme is not the end of the process. After the training is complete, those involved are encouraged to take part in a small project where they can apply their learning, enabling them to engage in continuous improvement and embed the learning within them. "It is more than just standard classroom training," says Bruyere. "People traditionally tend to take part in training, then they are busy and so never practice what they have learned. But in OE, they are encouraged to apply their learning in their day-to-day work environment so they and the business can see the benefits."



# A better record on safety and environment

2007 was a record year for sustainable operations at BP, with the lowest ever number of fatalities and injuries and continuing investment in safety, writes *David Vigar*

**BP'S RECORD** on safety and oil spills in the past two years was its best ever, according to figures released in the *BP Sustainability Report 2007*. The report shows that since 1999, fatality, injury and spill rates have all improved by around two thirds.

The report also maps out the scale of the programmes under way to improve safety and operations performance further, including \$6 billion spent on integrity management in 2007.

In his introduction to the report, group chief executive Tony Hayward says: "We continue to aspire to our ultimate goal of 'no accidents, no harm to people, no damage to the environment'."

Last year, BP had 167 injury cases requiring days away from work, compared with 188 in 2006 and 305 in 2005. There were 1,060 recordable injuries, just under last year's figure and significantly lower than the 2005 total of 1,471.

There were seven fatalities among employees and contractors, the same number as in 2006. This compares with 20 in 2003, 11 in 2004 and 27 in 2005, the year of the explosion and fire at Texas City refinery.

The number of oil spills of one barrel or more also fell—from 417 in 2006 to 340 last year. The volume of oil spilled was around 1 million litres (260,000 gallons), less than half the 2006 volume and less than a quarter of the 2005 figure.

The improving figures come as investment continues: the 'six-point plan', which tackles immediate priorities for process safety such as moving portable buildings from high risk areas and implementing standards on integrity and control-of-work, is expected to be largely completed by the end of 2009.

The operating management system, designed to reduce risks and improve the quality of operations for the long term, is now being implemented at 12 of the largest operations, including five US refineries, with implementation throughout BP due to have started by the end of 2010.

A range of training and development programmes have been launched for safety and operations, including: operating essentials, for managers of front-line staff; the Operations Academy, for senior operations and safety leaders; and an executive operations programme for senior business leaders who have accountability for multiple operations.

The Group Operations Risk Committee, which oversees process safety management and reviews performance, met 14 times in 2007.

The *Sustainability Report* also shows that BP's operational greenhouse gas (GHG) emissions fell to 63.5 million tonnes of carbon dioxide equivalent (Mte) in 2007, from 64.4 Mte in 2006. In 2007, increasing activity levels within BP Shipping, the start-up of the Texas City refinery and new oil and gas production, primarily in Angola, Algeria and Azerbaijan, were more than compensated for by the Coryton, UK, refinery divestment, some GHG reporting protocol changes and the delivery of emissions reductions. Around 0.6 Mte of sustainable GHG emissions reductions were delivered in 2007. ■



## GREENER WAYS TO VIEW THE SUSTAINABILITY REPORT

The *BP Sustainability Report* is being published in new formats this year in response to feedback from readers. A PDF format report can be downloaded from [www.bp.com/sustainabilityreport](http://www.bp.com/sustainabilityreport), this being the preferred approach among many in specialist audiences such as academics, investors and non-governmental organizations. The shorter, printed, *BP Sustainability Review 2007* contains a selection of highlights from the PDF report. Meanwhile online reporting at [bp.com](http://bp.com) covers a wider set of issues and reports on them in more depth.

The report covers performance in key non-financial areas such as safety, employees, the environment and development. It reports on issues that are judged to be the most important, or 'material', according to a process which assesses

them against BP's internal group risk approach as well as interest shown in them externally.

The report is aligned with key external standards including the guidelines of the Global Reporting Initiative (GRI).

In his introduction to the report, Tony Hayward says: "I am very conscious of the need to manage BP's business in a way that contributes to our long-term sustainability and that of the society and environment around us. Today, I believe that the best preparation for our sustainability is to focus on three priorities: safety, people and performance. Safety is at the heart of responsibility. Every action we take depends on our people. And performance provides us with the opportunity to make a broader contribution to society."

# Milestones



## First oil centenary The pioneers of the Persian frontier

BP HAS built its reputation for excellence on its ability to discover and develop gas and oil assets in frontier regions. This history of excellence began in Persia with the discovery and development of the first commercial oil field in the Middle East.

In 1901 an English entrepreneur, William Knox D'Arcy, secured an oil concession from the Shah of Persia. Encouraged to invest in Persian oil by favourable geological reports, drilling began in 1902 and lurched through a sequence of failures and financial crises until an astonishing moment in 1908, when the first oil reservoir in Persia and the Middle East was discovered at 360 metres (1,180 feet) below the surface. Barely a month before, D'Arcy and his partners, UK oil company Burmah Oil, began to run out of money and told the man in charge of the

expedition, George Reynolds, that if no oil was found at a depth of 460–490 metres (1,500–1,600 feet), he was to pack up and return home.

The southwest of Persia at the time was a frontier region in every sense of the term. Remote from Tehran politically and geographically, Ahwaz was its only significant town. There were few proper roads, no railways, and the population was largely illiterate and vulnerable to a wide range of illness and disease. The landscape, with its mixture of mountain and plain, produced frigid winters, rainy seasons with swollen rivers, and summers when temperatures rarely dipped below 38°C (100°F) in the shade. The semi-nomadic Bakhtiari tribes dominated the region, and were a law unto themselves. Into this environment stepped a diverse group of geologists, drillers, blacksmiths and labourers. They were British, Canadian, American, Polish, Indian and Persian, hauling the components of industrial plant used in petroleum exploration across rivers and mountain tracks, mostly by mule and cart, and drilling for oil 24 hours a day, year in, year out.

At the head of the exploration team was Reynolds, a self-taught geologist and drilling engineer who graduated from the Royal Indian Engineering College in Surrey, UK, and worked with Royal Dutch in Sumatra ►

### A LATE STARTER

THE MODERN petroleum industry began in the US, the Russian Empire and Asia in the second half of the 19th century, a period of rapid economic growth in Europe, the US and Japan. Oil was emerging as a cheap and superior form of fuel to wood and coal, and fuelled the engines of the transport revolution on road, at sea, and eventually in the air. When oil was discovered in Persia in 1908, it was the emerging fuel of the future for households, industry and the military.

BP was a late starter in the industry but had first mover advantage in the Middle East through its Persian concession. William Knox D'Arcy was encouraged to invest in Persia by the British geologist Boerton Redwood, a passionate advocate of the petroleum industry and close to the First Lord of the Admiralty, Jackie Fisher, when Royal Navy ships experimented with oil-fired engines in 1903. Persia, followed by Iraq in 1923, became the main oil producing area in the Middle East before the discovery of the Arabian peninsula oil fields in the 1930s.

For the Anglo-Persian Oil Company, the discovery of Masjid-i-Suleiman did not lead to overnight riches. The high capital costs of developing the pipeline and the refinery at Abadan almost bankrupted the firm and led directly to the majority shareholding being taken by the British government in 1914.

This early well at Chia Surkh, Persia, circa 1903, proved unsuccessful



before heading to Persia. He assembled a team of experienced Canadian and Polish drillers and machinists, as the petroleum industry had been going in Canada and Poland since the 19th century. They were a rough bunch of argumentative but dedicated men, complaining about each other's company as well as the food they had to eat, most of which came in cans from the suppliers to the armed forces. Conditions on the frontier were not helped by the severity of the climate and the vulnerability of men to heatstroke, disease and accident. Drilling, went on for 24 hours a day; it was hot and occasionally dangerous work. Although the company provided medical care initially by an Indian doctor called Raja Desai, it was not until the arrival of Morris Young in 1907 that a significant change took place. Young, born in Palestine, had graduated from Glasgow University Medical School. He was responsible for improving safety on the rigs, supplying protective gloves and clothing. As important as his medical duties, Young—through his treatment of local people, and in particular the son of a local Bakhtiari king—helped improve relations with the tribe.

From the outset of exploration in 1902, Reynolds had negotiated with the Bakhtiari for the right to use their land and recruit men as labourers. The Bakhtiari agreed to provide security, but factional disputes meant that



**George Reynolds (left), who led the early exploration effort in Persia and his employer, English entrepreneur William Knox d'Arcy**



**A geologist on horseback, believed to be George Reynolds, leads a geological survey**

armed robbery was common until 1908 when Lieutenant-Colonel Arnold Wilson arrived with a detachment of Indian Army troops. The demonstration of Young's skills and his quiet diplomacy led to a new security deal with the Bakhtiari and eventually the Indian troops were withdrawn.

Sleeping near Well No 1, Wilson was awoken at 4am on 26 May, as a sound like thunder heralded the first oil strike gushing 25 metres (80 feet) into the morning sky. In the pandemonium that followed, legend has it that Wilson leapt onto his horse, and rode to Ahwaz to telegraph the Foreign Office in London. D'Arcy was informed later that night whilst dining with his family. The following year, the Anglo-Persian Oil Company was formed, and with it the story of BP began. D'Arcy sold the concession rights to the new company in exchange for a shareholding in Burmah Oil worth around \$10 million in today's money, and a symbolic 200 shares in Anglo-Persian. Two years later, Reynolds, a man of action impatient with company bureaucracy, left by mutual consent.

The combination of capital, science, and physical endurance on the frontier unlocked the oil riches of the Middle East. The region became the premier source of the world's oil, and Great Britain, previously unknown in the world of oil, home to the headquarters of one of the world's most powerful businesses. ■

## Working life

# Going underground Bill Senior has helped to develop carbon capture technology and raise awareness of climate change

WE'RE ALL doing our bit to fight climate change. For some, it's a question of saving energy around the house; for others, it's about taking holidays closer to home or car pooling. There are only a few kinds of people who have the opportunity to make a bigger impact—among them politicians, campaigners and scientists.

Bill Senior, who works in Alternative Energy and is one of BP's experts on carbon capture and storage, falls into the last category. His work has influenced the Group of Eight (G8) leaders and the governments of developing countries and he has contributed to the work of a group that was rewarded with a Nobel prize for its "efforts to build up and disseminate greater knowledge about man-made climate change, and to lay the foundations for the measures that are needed to counteract such change."

A member of BP staff for 31 years, Senior started as a geologist in the UK North Sea. It wasn't until the late 1990s that he began to get interested in climate change, having moved from geology to exploration management and business development. He notes with interest that the first UK gas fields he worked on are now candidates for carbon dioxide ( $\text{CO}_2$ ) storage—30 years on.

"It caught my attention just as BP itself started to look at limiting its emissions. The company introduced an internal emissions trading scheme in 1998. I took some of the responsibility for emissions trading within my business unit," Senior says.

Senior was posted to Singapore in 2000, where one of the challenges he faced was dealing with some gas fields with very high  $\text{CO}_2$  emissions acquired by the company through the takeover of US oil company ARCO. "When we became involved we wanted to work on reducing the emissions so we started looking at carbon capture and storage [CCS]," he says. "It was quite early days really, and CCS was a new topic then."

CCS is the label given to any process that limits  $\text{CO}_2$  emissions by trapping the carbon contained in fossil fuels so it isn't released into the atmosphere. "The idea is to capture the  $\text{CO}_2$ , to compress it and inject it for long term disposal in geological formations such as disused oil and gas



**Bill Senior works in Alternative Energy and has been a BP employee for 31 years**

reservoirs and saline aquifers."

There are two approaches to CCS, depending on the point that the  $\text{CO}_2$  is harvested. Post-combustion capture happens after the fossil fuel has been burnt— $\text{CO}_2$  is one of the components of the flue gas and can be stripped out using a solvent. Pre-combustion capture involves separating the hydrogen from the  $\text{CO}_2$  and using the hydrogen rather than carbon to generate power.

Whichever method is used, says Senior, the advantage of CCS is that it allows a company like BP to meet two key objectives—one of continuing to supply affordable and secure energy primarily through fossil fuels, and another by actually reducing greenhouse gas emissions and mitigating climate change. This will provide exciting new business opportunities for BP.

In fact, the company has been involved in a range of 'learning by doing' CCS activities since the late-1990s. Among others, these include the BP-operated  $\text{CO}_2$  capture and injection project at its In Salah gas field in Algeria; the  $\text{CO}_2$  Capture Project (CCP), an

international partnership of energy companies investigating technologies to reduce the cost of capture; and the Carbon Mitigation Initiative with US auto maker Ford and Princeton University, aimed at finding sustainable solutions to climate change. Last year, BP also formed the Hydrogen Energy joint venture with Australian mining company Rio Tinto to undertake 'decarbonized fuel' projects which include CCS.

So how far away is widespread use of CCS? "Well technically and technologically we believe all the components are ready—which is not to say they can't be improved—but really the policy and regulatory framework is lacking," says Senior. "CCS needs fiscal support to make it viable and regulatory support to help reassure consumers that it's a safe and worthwhile process."

So the technology needs a little help from the lawmakers before it can live up to its potential—and it was this that made Senior realize the importance of sharing his knowledge with a wider audience.

"In 2003 the Intergovernmental Panel on Climate Change [IPCC] decided to produce a special report on CCS technology. They convened a meeting of experts and BP nominated me and Mike Wilkinson to join. At the time I was the technology programme manager for CCS. "For an IPCC report, which is intended to inform policymakers, you get between 150 and 200 authors who sit down to write a consensus view based on peer reviewed literature."

As you would expect, getting 150 people to agree to a common line wasn't easy. "Well it's a fairly drawn out process, a little bit frustrating at times but rewarding in terms of the opportunity to work with experts in the field and inform global policy makers," says Senior. "We basically delivered what was recognized as the definitive assessment of the technology."

The work paid off. "I think we had an impact," he adds. "The policymakers are now very much more aware of CCS's role and it's an awareness that has grown really very rapidly." In 2007, the IPCC, together with Al Gore, was awarded the Nobel peace prize for its efforts. ■



**T**HIS ISN'T fine-tuning, but going back to basics," says Dana Deasy, recruited to overhaul BP's information technology (IT) function. "We're literally rebuilding."

An IT professional with a track record in the automotive, manufacturing and aerospace industries, Deasy is one of BP's few externally-recruited group vice presidents. Hired from auto maker General Motors in the US last October, getting to know BP's structure and culture has been paramount. But he is quickly making an impact.

His first move was to announce that all teams in the information technology and services (IT&S) function would become a single unified and integrated organization. It signalled the start of a huge transformation programme involving some 4,000 people worldwide. With IT now underpinning virtually everything BP does from the oil rig to the filling station, the change will ultimately affect every part of the business.

"BP is in the middle of a massive transformation," says Deasy, who is based at BP's London headquarters. "Within that, we have a IT&S organization with the potential to play a critical role in the forward agenda."

"However, historically, the IT function has been highly decentralized, often doing the same things in a variety of ways. This means significant complexity, making it harder and more expensive to support the business. So, as a first step, we needed to get everyone moving in the same direction with a clear understanding of what needs to be done."

Deasy brings extensive IT leadership experience from global corporations that have

# A simpler, standardized approach

Dana Deasy, group vice president, information technology and services, is leading a major transformation of the function as part of BP's forward agenda

gone through huge change. Joining BP just two weeks before the forward agenda was announced, he hit the ground running. First, he talked to several hundred people, both in and outside IT&S, to deeply understand how the function works and how its customers perceive it. The results were startling.

Deasy found more than 60 IT help desks, dozens of processes for managing IT incidents, and a sprawling landscape of 6,100 software applications that his function was being asked to support. "IT users find things complex and frustrating, with too many touch points," Deasy adds. "Overall, I was surprised at the level of decentralization and how often IT was being reinvented time and time again,

without cost-effective standardization."

Such issues are not unique to BP and Deasy's discoveries weren't all bad news. "There are lots of examples of IT&S doing IT well," Deasy emphasizes. "The highly sophisticated computing environment in the exploration and production segment is truly leading-edge and gives BP significant competitive advantage. We've also played a central role in transforming a number of the back office systems for the integrated supply and trading function as well as software that can predict and detect problems before they happen in refining."

"We have a great deal of very good talent. The problem is that these people have often been deployed in support of just one business."



RICHARD DAVIES

So, a key focus for us now is accessing this talent, propagating it and deploying it for the benefit of the whole organization."

In December 2007, Deasy presented BP's leadership with his plan for the new IT function. Launched in January, the '4Rs' programme maps a total reworking and standardization of its structures (Rewiring); technical capabilities (Retooling); core processes (Re-engineering), and an optimization of suppliers and contractors (Resourcing).

"We're going back to basics in terms of processes, people, how we deliver and how we get at our costs," says Deasy. "We need to optimize use of our talent, free up resources and provide innovation and new tools to meet the needs of the business."

Some pertinent changes have already been introduced, including jettisoning 'digital communications technology' as the name of the function last month. "We needed to go back to a very straightforward name, so we changed our name to 'information technology and services,'" reveals Deasy. "This is a declaration to ourselves and the wider community about why we're here and what we need to be doing."

Already, a single new process is in use for major IT incidents that will cover all incidents by the end of the year. Meanwhile, software applications are being scrutinized to identify candidates for elimination. The future will see service desks integrated worldwide—with just one number to dial—and offer BP businesses far greater transparency in terms of service and cost.

"We are also establishing a new enterprise systems group, which will initially bring together our SAP technology, tools, talent and

processes," Deasy explains. These core systems—the foundation of BP's IT backbone—will allow the businesses to access the right information, complete transactions and access a single source of the truth.

"The backbone includes the core processes of our businesses, including process to pay, order to cash, production revenue accounting, finance and human resources. By consolidating how we implement and run core enterprise systems, we will provide services in the most cost effective way and with the highest quality across the group."

Not all changes will happen silently behind the scenes. Deasy recognizes that, at times, the

### **'Standardization will go hand-in-hand with building deep intimacy with the needs of the business.'**

smallest things can signal a shift in BP priorities and ways of working. A recent example is the new set of IT policies that are designed to simplify their offer.

"If we eliminate duplication of hardware—like the option of more than one mobile device or laptop per person—we can reduce costs for maintaining IT," Deasy says. "Right after we presented this to the leadership they were quick to hand in extra laptops and mobile devices."

At first glance, you wouldn't think these types of policies would make much of a difference to BP. However, with more than 100,000 employees and contractors relying on the company's IT services and hardware to do their jobs, even simple policy changes can

have a profound impact.

It will be a long journey, but the result will be a streamlined IT function that will be easier to work with for BP's businesses, IT users and service providers. And, Deasy says, there's a healthy appetite for change: "There's a sense of urgency and readiness to dig deep, replicate what works well, throw away what's not needed and deliver our full promise."

"Standardization, wherever possible, will go hand-in-hand with building deep intimacy with the needs of the business. We have to fix our internal costs and operations. However, let's not forget we exist to support the business—and our first priority is to deliver the transformation without tipping IT over or interrupting services."

"Ultimately, I would like to see IT become a much simpler organization," says Deasy. "In the users' eyes, that means knowing where to go for IT services and support and receiving responsive and timely service."

"I look forward to moving our agenda beyond headcounts, costs or fixing internal processes, but instead focusing on delivering great projects—what we're doing to bring innovation to the businesses."

If you use a computer—and who doesn't—you are an IT user. "I want people to be able to say: 'When I joined BP, the tools I needed were there, I had the right software and the authorities to access everything I needed right from the start, and I knew who to call if there was a problem,'" says Deasy.

Deasy's vision is simple, he wants IT users and BP's businesses to "find us highly professional, thoroughly 'joined-up', responsive and, above all, easy to do business with." ■

## Refining and marketing

Themes of safety, efficiency, teamwork and ‘getting things right first time’ have propelled the Air BP business to global success, as *Lucy Harvey* discovers

# Air BP team is flying high

**H**Igh oil prices should automatically translate to high profits, but there are teams in BP that need to work harder to succeed in times of \$100 oil.

Air BP, a global sales and marketing business which supplies aviation fuels and lubricants to more than 700 airlines, numerous general aviation operators and military operations, needs to pass the rising price of fuel directly to its customers before adding its own delivery costs and any profit margin.

So it is testament to the entire Air BP team’s operational expertise and negotiation skills that in a climate of soaring oil prices, and a declining US dollar, it was able to achieve its best ever financial performance in 2007.

“Recording our best year at a time when the costs of our working capital were at a record high was a real achievement,” says Rita Griffin, Air BP and marine fuels chief executive officer.

“All areas of our business, from safety and operations to cash collections, performed extremely well, and in sales our success was driven by growth in our volumes and having the confidence and momentum to undertake very difficult negotiations, particularly on pricing conditions and payment terms.”

It seems that demonstrating resistance to external pressures has become second nature to the Air BP team, which has braved a series of downturns in the aviation industry during the business’s 81 year history. Most recently the team has dealt with the consequences of two Gulf Wars, the SARS crisis, and the 9/11 terrorist attacks which resulted in the bankruptcy of a considerable proportion of the US airline industry.

Air BP’s vice president of sales and market-

ing, Peter O’Callaghan, says: “I have been in Air BP for many years, during which we have seen a number of highs and lows affect BP, our customers and the supply and demand for our products.

“The strength in our business is in constantly adapting to these challenges, looking for opportunities and areas to improve, being crystal clear on our competitive drivers and, against this background, nurturing a wide range of global customer relationships.”

In line with BP’s forward agenda, the Air BP team is currently reviewing its global portfolio to ensure the business is linked to sustainable markets and, significantly, to BP’s new fuels value chains.

This has included reducing the number of countries the business operates in, and revising cost structures.

“We are focusing the portfolio but growing the business,” explains Peter Short, Air BP’s chief operating officer. “In the past we have spent capital going into new areas, which has resulted in us being the only major western oil company in the aviation business in China for example, and being the first downstream fuels business in the likes of Eastern Europe and Brazil.

“Now our focus has turned more towards

**‘The strength in our business is constantly adapting to challenges, looking for opportunities and areas to improve, and nurturing global customer relationships.’**

Peter O’Callaghan

identifying growth opportunities and investments in infrastructure closer to home, thereby monetizing our existing portfolio rather than actively broadening our geography.

“In addition, by reducing the number of countries we operate in, we will reduce complexity in the business.

“It is also incredibly important that our global strategy is aligned and integrated with the fuels value chains, and that all business is done for the greater good of BP.”

The investment opportunities to which Short refers include spending money on improving pipelines and terminals in existing strong markets, which have not previously received funding from airlines, airport authorities or the oil industry. Major projects of this nature have already been completed in the UK, Germany, Dubai and Sharjah.

**Team spirit:** While the team has a new business focus, in terms of safety and performance they are sticking to a long-standing mantra: ‘getting it right first time’.

“Safety is our licence to operate and it is the first thing we measure and track,” says Tim Bingham, Air BP’s technical director. “We are dealing with multi-million dollar aircraft with volatile fuel, surrounded by a lot of airport operations, so we are incredibly focused on getting all of our activities right first time.”

He adds: “One of our strengths is sharing powerful learnings from across the world and each quarter we recognize the best global learning experiences, most recently from Australia, Zambia and the US.”

In terms of teamwork, Air BP thrives on connectivity. The whole sales team is privy to real-time business information through ▶





The Air BP team thrives on its global connectivity and its mantra of 'getting it right first time'

their unique tender debrief system, where detailed information about each deal is shared in email format immediately after conclusion.

O'Callaghan says: "Every single deal is written up and shared with the entire global sales team, whether it is good news or bad news. It is a system that is absolutely entrenched in Air BP."

"The beauty of it is its speed and clarity, and although it can be painful when we lose some key business, it is real and it spreads real-time competitive intelligence to sales colleagues across the world."

"It also helps establish a foundation of global confidence and understanding."

"For us, it is just as important to recognize that we will lose some business if the terms are not right, as it is to fight to gain and retain strategically important business."

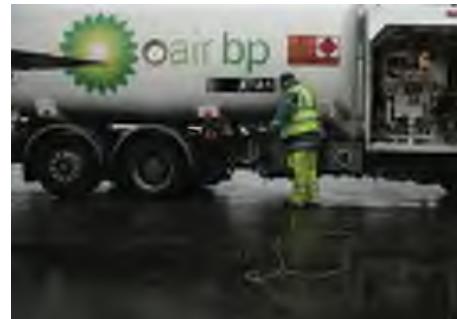
"Consequently, we are regularly churning airline contracts at our airports in order to optimize our returns."

**'One of our fundamental strengths is the consistent team spirit that exists across all of our countries and functions. We all absolutely depend on each other.'**

Rita Griffin

"And this is where the breadth and depth of all of our customer relationships—airlines, general aviation, military, fuels and lubricants—is so crucial, as this provides the platform to make those difficult decisions in an open way, without damaging the long-term relationship."

"Fortunately, over the years, our successes have far outnumbered our disappointments, and the good news is recognized and celebrated globally with considerable vigour."



Says Griffin: "One of our fundamental strengths is the consistent team spirit that exists across all of our countries and functions."

"We all absolutely depend on each other. The sales guys depend upon each other to win tenders from overseas customers. In turn they depend on the supply guys to source and move product efficiently, on the technical and operations guys to deliver fuel to customers safely and efficiently, and on the finance guys to collect the cash and pay the bills."

"We are collecting tens of millions of dollars a day just to keep up with our billings. We can't miss a day and that comes back to getting it right first time."

"The behaviours we need from our people are so important, but they do not come automatically. We go to a lot of trouble to ensure we build personal relationships and commitments through face-to-face contact and the right behaviours, because a solid team is the foundation for a profitable business." ■

# New audiences for Castrol classics

Classic footage of rallying in the 1970s and 1980s has been digitally remastered and made available for a global audience by BP's video library, as *Lucy Harvey* reports

AS WORK continues on a two-year project to digitize BP's extensive video library, a new DVD boxset featuring archive rally footage from the 1970s and 1980s has been made available to the public.

The *Castrol Classics* set features hours of racing action, as well as interviews with some of the sport's top drivers including Briton Roger Clarke, Finnish drivers Ari Vatanen and Hannu Mikkola, and Swede Stig Blomqvist.

Before now this footage had only been available to those racing fanatics who personally contacted BP's video library, based at Southwark Street, London, UK. Now the boxset can be purchased for \$40 from website [www.motorsportdvd.com](http://www.motorsportdvd.com).

"The set features eight famous titles shot in the 1970s and 1980s," says Steve Saint, managing director of bhp group, the independent production company responsible for digitally remastering the films and producing the DVDs for BP. "We hope by giving them this new lease of life we can get them to a new audience."

The eight films included in the boxset are: *Flying Finns*, a film examining the techniques of Hannu Mikkola and Timo Mäkinen at the 1968 Thousand Lakes Rally; *Stages to Victory* featuring the 1976 Castrol/Autosport Rally Championship; *Appointment in Penha* featuring the 1977 Rallye de Portugal; *A Tale of Two Rallies* which records the 1979 San Remo and the 1979 Lombard RAC rallies; *Chariots in the Sun* featuring the 1981 Acropolis Rally in Greece; *Twilight Zone* with dramatic footage of Hannu Mikkola competing in the 1982 Swedish Rally; *A Place in the Sun* featuring the 1983 Tour de Corse in Corsica; and *Local Heroes*, a report on the Thousand Lakes Rally in Finland with local heroes Hannu Mikkola, Markku Alén and Ari Vatanen fighting to the finish.

**Film gems:** The BP video library holds more than 15,000 videos and film reels in total. With rare footage dating back to 1915, the archive includes the Oscar winning short film *Giuseppina*, television commercials, award winning test films produced by BP, and a series entitled *Oil Review*, which has a wide variety of oil-related and



Archive footage of racing in the 1970s and 1980s is featured in the Castrol Classics boxset, made available by BP's video library, based in the UK

everyday footage from the 1950s.

Video material is available free to BP employees, and for a fee to external video programme makers. Work to digitize large parts of the archive to secure the collection and provide easy access to the archive for BP employees worldwide is expected to be finished later this year.

Television commissioning editor Steven Croston says: "The BP video library holds tapes and films with footage going back more than 80 years, but until two years ago the library was outsourced. The collection of 15,500 tapes were poorly stored, some were beginning to degrade, and footage could only be viewed by visiting the library. This was a



pity because we own some real gems, some of which are of global historical importance.

"The collection—which has a replacement value of \$250m—is really only of value if people can view it. As such, we are now in the process of digitizing the content. By July we will have digitized 500 hours of fully catalogued film footage, which will be available to preview and download online." ■

For more information on the BP video library, visit [www.bpvideolibrary.com](http://www.bpvideolibrary.com)

**'We hope by giving [the films] this new lease of life we can get them to a new audience.'**

Steve Saint

# A new star rises in the east and shines

BP is already the world's largest producer of purified terephthalic acid, but the opening of a new unit in China is helping it keep up with rapidly growing demand

IT IS the biggest, most technologically advanced single-train purified terephthalic acid (PTA) unit in the world, with the lowest operating costs and emissions and the highest levels of energy efficiency. Perhaps most importantly, BP's Zhuhai 2 plant at Guangdong in southern China is now fully operational—on time and under budget—and running at virtually full capacity, reinforcing the company's leadership position in what is by far the world's largest PTA market.

More than 16 million tonnes of PTA were used in China during 2007—half the worldwide total. This represents an increase of 19% for the year, against global growth of just eight per cent, with demand being fuelled principally by the country's rapidly developing textiles industry and its craving for ever-increasing amounts of the polyester that PTA helps produce.

The business rationale for a new PTA unit in China, therefore, is clear. But Zhuhai 2, the latest development in a successful partnership with the Fuhua Group, is a triumph for BP on many more levels besides. Its construction involved some of the lowest capital costs in the industry, for a start, thanks to a proactive local procurement policy. More than 50% of equipment and materials were sourced from the Chinese mainland.

Annual PTA production capacity at the Zhuhai complex was also doubled from 500,000 tonnes to one million tonnes from the second unit's first day on-line, decisively reinforcing BP's status as the world's leading producer of a raw material that is also used to make bottles, packaging and film products. With Zhuhai 2, BP will be able to serve East China around Shanghai, Zhejiang and Jiangsu with a complex distribution and supply chain system to deliver PTA to customers (see panel on page 27).

But it is probably in the environmental arena where the new unit has made the most significant impact. Thanks to BP's revolutionary Scale Optimized X (SOX) technology, which enables previously discarded or

destroyed process streams to be recycled, Zhuhai 2 can boast 65% lower greenhouse gas emissions, a 40% reduction in solid waste, and a massive 75% decrease in liquid waste discharge. For every seven units of process water consumed at a typical PTA plant, Zhuhai 2 uses just one.

The groundbreaking engineering design also ensures that the unit occupies a plot just half the size of its older sister, despite a total production capacity that is double. And, as if that wasn't enough, Zhuhai 2 is also self-generating in terms of electricity.

"Most PTA plants use a lot of electricity, but Zhuhai 2 harnesses the steam and gas produced during the oxidation process and runs them through two separate turbines," says Skip McQuillin, BP's PTA process technology manager. "The result is that Zhuhai 2 is a net producer of electricity, so it can also help offset power usage at Zhuhai 1."

"It is fantastic technology, which we are currently in the process of patenting. SOX could easily be utilized if additional new PTA plants are built anywhere in the world. We are already working on the next improved version of the technology. And, theoretically, certain components of the technology can be utilized in retrofit improvements or expansion of existing PTA assets."

One clear benefit of the new technology is the high level of automation, which has kept staffing increases and training costs to a minimum. Only 40 more employees, all of them local Chinese, have had to be taken on at Zhuhai to operate the new unit—an increase of just 22% for the complex overall. They spent nine months or so in training

**'We are extremely happy with the first couple of months. We have proved we can operate the plant safely as well as efficiently.'**

Dan Leonardi



before production began in December 2007, using a simulator to mimic real-life situations to ensure that operating problems could be kept to a minimum.

"All in all we are extremely happy with the first couple of months," enthuses Dan Leonardi, BP Zhuhai's works general manager. "It's been a steep learning curve in the two months since we went live and, as you would expect, we've had a few mechanical issues that have led to two sets of minor modifications to the process. But we are already up to 95% capacity, and we have proved that we can operate the plant safely as well as efficiently."

He adds: "There's been a lot of hard work by our Zhuhai team in getting to this point. But I also have to pay tribute to the support we've received from BP's global PTA team... not just the R&D [research and development] guys, but also the process foremen and operating staff from other sites such as Kuantan and Cooper River, who have worked with us before and during the start-up period. Their advice and guidance has been crucial." ■



Production at Zhuhai 2 began in December 2007 and has reached 95% capacity



## TRANSPORTATION NETWORK



## Regional solution to distribution challenge

BP is the largest producer of purified terephthalic acid in the world, and the expansion of its plant at Zhuhai allows it to serve a large customer base in East China in addition to a customer base in South China. Geographically, however, the process of actually getting the product to those customers has presented something of a challenge: while they are nearly all situated around Shanghai, Zhejiang and Jiangsu, a major economic and industrial region in East China, Zhuhai itself is located in Guangdong in the south.

BP's solution is a network of regional distribution centres and a complex supply-chain management model.

"To satisfy demand, we need to transport around 60,000–70,000 tonnes of PTA to East China every month," explains James Yim, vice president sales, marketing, supply and logistics for BP aromatics Asia. "That means trucks running from the site to our nearest port in Zhuhai, a ship from there to ports in East China, and finally another truck or barge to the customers."

"The issue with this system, of course, is the lead time of ten days or so that it entails, when other producers can guarantee a next-day delivery."

BP's answer is to turn itself into a 'virtual' local producer. "Normally we wouldn't dispatch any of the PTA until we had received firm orders and payments," says Yim. "But we can't afford to do that in this situation. So we make the shipments to East China as a push strategy, and take orders and receive payments either when they have arrived or while they are still on the way."

"The network of regional distribution centres means we have some kind of storage facility if and when we need it."

# Safety first for the lubricants team

After a successful leadership conference, BP's lubricants team has an ambitious aim to reduce accidents among its employees to zero, as *Paul Whitehouse* reports

WORKPLACE SAFETY has improved dramatically in the modern era and the oil industry is no exception.

BP's lubricants team was rightly proud of the significant reduction of personal injury cases and vehicle incidents in 2006, but the strategic performance unit (SPU) is now focusing on working towards its ultimate aim—to reduce accidents among its people to zero.

For a business which has 8,000 people operating around the world, in a multitude of different functions and in varied environments, that is an ambitious goal.

It is accepted that the conventional approach of imposing safety restrictions would be unlikely to succeed on its own, so instead the importance of safety is being instilled into the minds of all staff. This philosophy formed a crucial part of a recent lubricants leadership conference, held in Pasadena, California, where Mike Johnson, the senior vice president of lubricants, encouraged leaders to embrace safety, rather than try to dictate rules.

"We want to approach safety from a different angle—to embed a safety culture in the hearts and minds of our people instead of just meeting targets," he explains.

"We have invested a lot of time on this over the last few years and that has really driven up safety standards."

Lubricants employees face three main areas of safety risk: road transport, as the organization covers 150 million km (90 million miles) every year; transporting raw materials and hydrocarbon products over water; and manufacturing products or their use on customer sites. Programmes are in place to manage all these risks, and effective training has helped reduce overall accident and casualty levels. But the lubricants team is now exploring more far-reaching ways to change attitudes and increase commitment.

The business is working with shipping and industrial customers to raise the bar on safety for them, and ensure that people and products are safe on customer locations. The next step

is to use different tactics to improve on the gains already made.

"We are trying to take it to another level," Johnson explains. "To take safety to the next level, you need to get into the hearts and minds of people. We still need rules and regulations, but we need more than just that if we are to get to a completely injury-free environment."

To underscore that, at the Pasadena conference a safety session was organized without using a single statistic. Instead the team talked about personal stories and about what safety meant to individuals.

**'To take safety to the next level, you need to get into the hearts and minds of people.'**

Mike Johnson

"The objective is to win people over," Johnson says. "You can force people to comply, but you can't force anyone to commit."

"Our objective is to be totally accident free—it is not just about being better than last year. If you want to achieve an incident free environment, everyone has to totally believe it's the right thing, and it's more than just words. Those who attended the conference have taken the accident free philosophy and will spread it in the areas of the business where they operate."

Early indications suggest the new approach was well-received as feedback from the conference has been very positive. "The feedback has been the best I have ever seen from any conference," Johnson says. "During the session delegates broke into table discussions to allow people to get their stories out. There was a lot of active involvement and personal stories coming out into the room. It became a very engaging and personal session. If you can persuade people to tell their stories, they will resonate with this much more effectively than with statistics."

"We made a stand that every employee ►

Mike Johnson is driving safety as the top priority for the BP lubrications team





The lubricants leadership conference in Pasadena, below, and children with bikes built by the team, above



should go home safely every day. Rather than setting a number, we have asked everyone to sign up to that commitment.

“Although we had 120 people at the conference, there are 8,000 people in our business and we are asking them to change the way they approach safety.”

Lubricants will continue to fulfil the commitments of BP’s six-point plan and reinforce the importance of those rules, alongside the work to increase employee commitment.

“We are trying to create a groundswell willingness and commitment to safety,” Johnson says. “When we personalize it to the point of everyone going home safely, there can’t be anyone who doesn’t want to sign up to that. No-one should have to knock on the door of a husband, wife, brother, sister, father or mother and tell them that their loved one won’t be coming home that night due to an accident at work,” Johnson says.

BP Lubricants is also celebrating two very successful years financially, but now has an even more demanding business target for the future. Johnson highlights that the objective was to meet several targets by the year 2012, with a package of targets rolled up

### **‘Our strategic agenda is centred on four key areas: safety, growth, efficiency and enablers.’**

**Mike Johnson**

into the figures of that dateline.

“The first figure ‘2’ represents a commitment to double the profit level by the year 2012. The ‘0’ represents the organisation’s goal to reduce accidents among staff to zero, and the 12 is a financial objective, to boost lubricants return on capital by 12 percentage points.”

Improved performance is expected to come from greater efficiency, though Johnson says it will not be achieved by cost savings alone. “You cannot just save your way to success in a customer facing business. Our strategic agenda is centred on four key areas: safety, growth, efficiency and enablers—with this focus we are able to engage our people on the priorities that will take our business to the next level in service of the BP forward agenda.

“The conference this year provided space

for delegates to discuss and input into each of these areas and will continue to do so through a variety of channels going forward.

“Our leadership team represents diverse areas of the business and locations throughout the world. Most of the delegates only get the opportunity to come together once a year at the conference, therefore we feel it’s important to create a session which encourages strong relationships,” says Johnson.

One way the leadership team achieves this is to host a team building exercise that directly benefits a local charity. This year delegates were given components and asked to construct bicycles as a team-building exercise at the start of the event, with 35 finished cycles handed over to a charity which distributed them among disadvantaged children.

“You can imagine their faces, some of these children had never had a bike before in their lives,” enthuses Johnson who closed the conference with his vision of the future in which he asked delegates to close their eyes and imagine it was 2012.

He says: “If we do the things we talked about we will truly be able to say we have taken our business to the next level.” ■

# News in brief

UK

## Supply contract

Castrol Marine has been awarded a three-year contract by UK ferry operator P&O to supply lubricants to its entire ferry fleet. Castrol previously supplied all but two of the company's vessels. P&O carries more than 10 million passengers a year, and serves many popular cross-Channel routes. Castrol Marine account manager Simon Cox said that there was severe competition for the business, as all major lubricant companies tendered for the 2.7 million litre contract. He said: "We definitely weren't the cheapest, we had to be competitive on price, but our track record, the quality of our service, strong customer relationships and great technical support proved to be the deciding factors."

Europe

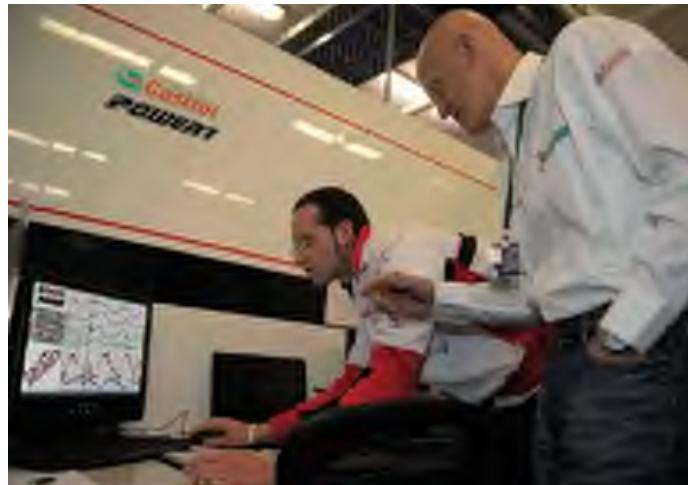
## Winning team

BP's group trade marks team won the Pro Bono Award at the inaugural International Law Office European Counsel Awards for a series of workshops they organized for students in East London. The master classes in intellectual property were organized as part of the Young Enterprise scheme, designed to help young people learn about business. After the workshops the team received high praise from the Young Enterprise charity and the structure of its seminars has been used as a template for other classes.

US

## Invigorating launch

This summer a new BP gasoline formula, Invigorate, will be used in three BP gasoline grades—BP Regular, BP Silver, Amoco Ultimate—at 5,000 stations east of the Rockies. The formula helps protect vehicles against corrosion, deposit and sludge formation and improves performance. Kevin Phelan, vice president of fuels marketing, says: "This is the biggest product launch in US BP history. We're offering a differentiated product with real benefits at a competitive price, with a site experience that offers more than our consumers expect."



Europe

## Sharing statistics

Former international soccer referee Pierluigi Collina swapped notes with grand prix motorcycle racing teams about data analysis in sport at the Portuguese MotoGP as part of his role as ambassador for Castrol's sponsorship of UEFA Euro 2008. Collina has helped the global lubricants company develop the Castrol Performance Index—a system of analyzing player performance which will be available on dedicated website [www.castrolindex.com](http://www.castrolindex.com) during the summer tournament.



US

## Competition success

A music-themed competition to promote the arrival of BP's convenience brand ampm in Chicago and Atlanta has been deemed a success after the event received strong media coverage in the two local markets and nationwide. The competition, organized in association with game manufacturer Activision, was designed to appeal to ampm's target audience of young men. It featured a month-long competition at 12 sites and attracted more than 1,000 entrants. Judges chose Nick Lanzo, from Elmwood Park, as the overall winner. Lanzo (pictured with his prize guitar) was rewarded for his playing style and his "overall rock star look".

US

## New website

Castrol US has launched a website offering advice on how and where to recycle used motor oil. The website [www.castrol.com/recycling](http://www.castrol.com/recycling) offers visitors the chance to automatically find their nearest motor oil collection centre simply by entering their postcode. Highlighting facts about engine oil the website reveals oil facts including that if the oil from one oil change is improperly disposed of and not recycled it can contaminate one million gallons of fresh water, which is a year's supply for 50 people. There are more than 30,000 locations in the United States that will accept and recycle used motor oil.

Bangladesh

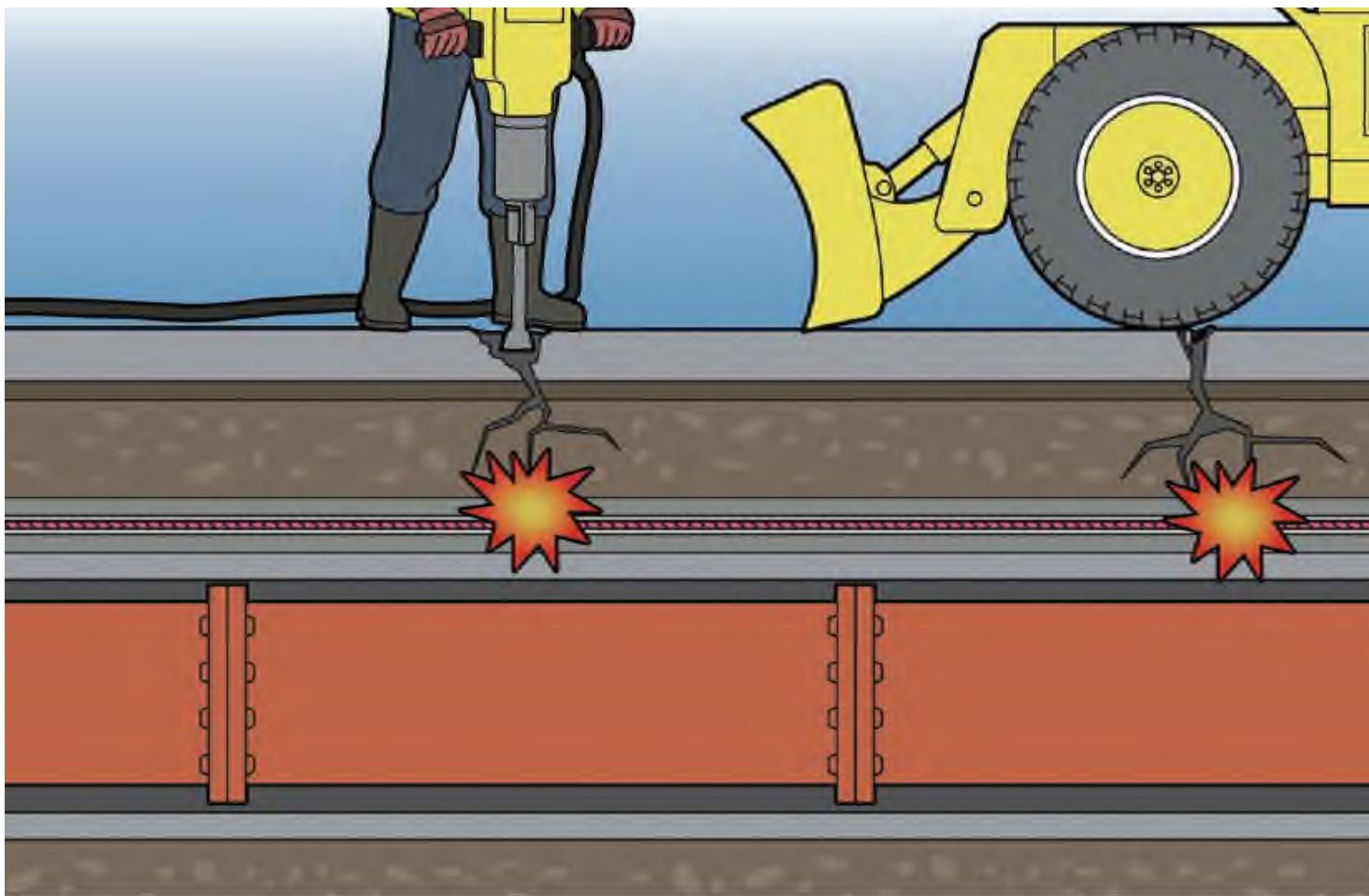
## New lubricant

BP's advanced car lubricant Visco 3000 is now available in Bangladesh at all Meghna filling stations. The product has been designed to keep engines up to 30% cleaner than other lubricants, improving fuel economy and engine life. BP Visco 3000 is already a popular brand in Europe and the Middle East. BP has sold lubricants in Bangladesh through Meghna Petroleum since 1985 and has a large share of the lubricants market in the country.

UK

## Fleeting results

Supermarket chain Asda is planning to use Castrol's fully synthetic Elixion 0W30 engine oil and SAF-XO driveline oil products for its 1,000-strong distribution fleet in the UK after a year-long trial showed fuel economy improvements of two per cent. The trial—the longest and most rigorous ever conducted by BP—included testing dozens of Asda's Scania trucks, analysing 7,900 daily fuel economy results and assessing mineral-based lubricants versus full-synthetic motor oil performance over an estimated 4.5 kilometres (2.8 miles) of driving. If further trials prove successful Asda will begin switching its entire UK distribution fleet to Castrol's products in the fourth quarter of 2008.



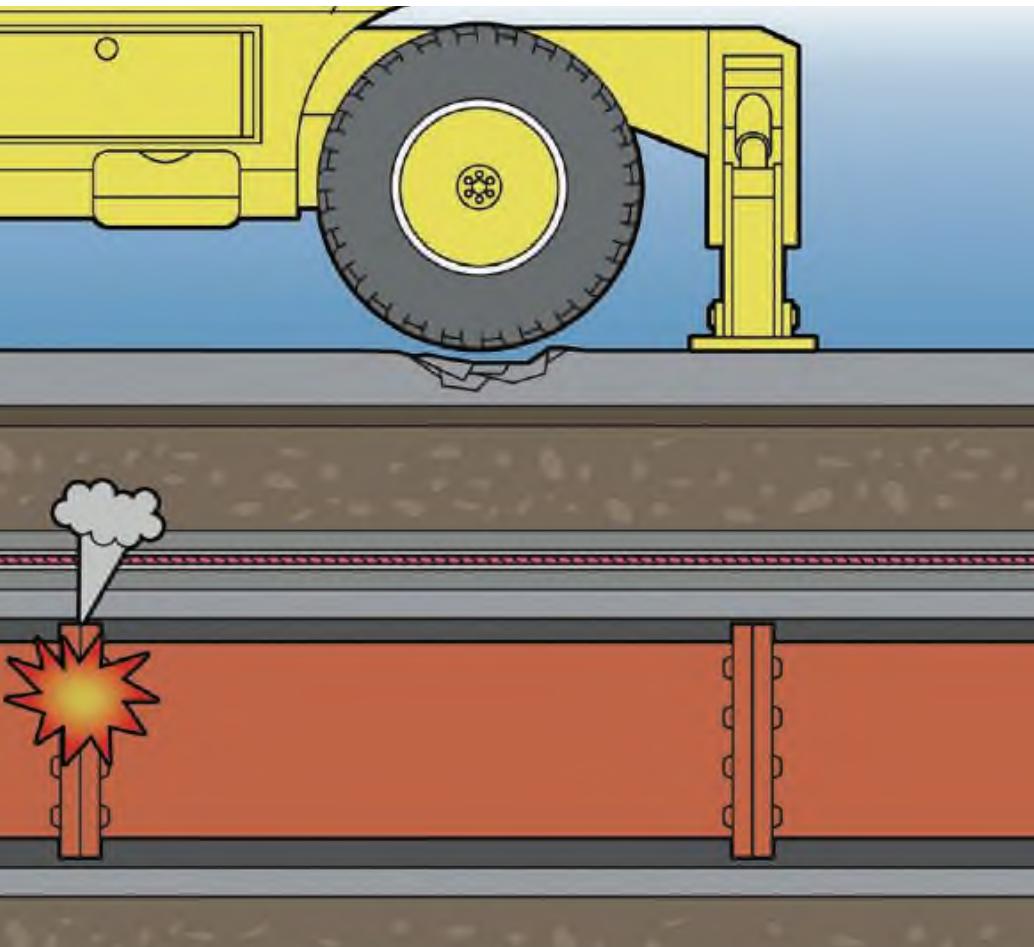
# Picking up bad vibrations

BP is piloting an innovative pipeline integrity system that uses fibre optics to identify asset threats with startling accuracy

THE WORLD beneath our feet is mysterious. Pipelines, many of them underground, are a fundamental part of fuel supply operations. They carry crude oil, natural gas and petroleum products from the point of production to refineries, storage facilities and distribution depots, and on to the forecourt, power station or customer.

Industry figures show there are 483,000km (300,000 miles) of gas transmission lines in the US, and some 36,000km (22,400 miles) of crude oil and products pipeline in Europe. BP operates around 60,000km (37,300 miles) of oil and gas pipelines 'in the ground', on and offshore around the world.

Integrity is paramount, of course, to avoid movement, rupture, and leakage. Although pipelines are designed to be robust and buried out of harm's way, they don't like impacts, ground movement, vibration or any kind of untoward encroachment or interference such as illegal tapping. They don't take kindly, either, to very heavy vehicles being driven over them, accidental severance by a third party contractor's excavation tool, or even extensive



## INTEGRITY RISKS TO PIPELINES



## Threat mitigation

There are numerous external threats to pipelines, all of which can potentially cause a leak in the line — minor, catastrophic, or somewhere in between.

Particular threats vary from region to region. Alaska suffers from frost heave, which can force a pipeline out of the ground. In Colombia, landslides are a major concern, whereas in Nigeria and China there have been plenty of reports of illegal tapping and vandalism of oil and gas pipelines — serious threats to human life as well as to operations and profitability.

Other threats to pipelines around the world can include:

- Excavator or construction equipment impact
- Heavy vehicles crossing pipeline corridor
- Exposure of pipe due to erosion, wash-outs due to excessive surface water and subsidence
- Landslip
- Driving piles
- Seismic fault movement
- Agriculture equipment (eg drain works, fence installation)
- Failure of adjacent utilities (eg of other pipeline in same corridor or crossing)
- Unexploded ordnance
- Sabotage
- Conflict and war

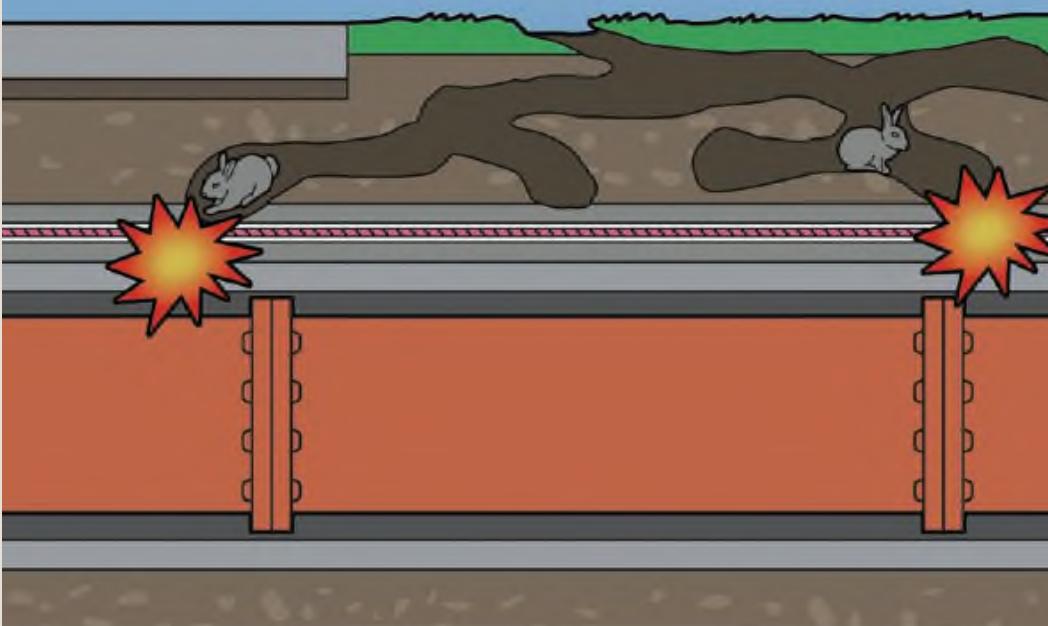
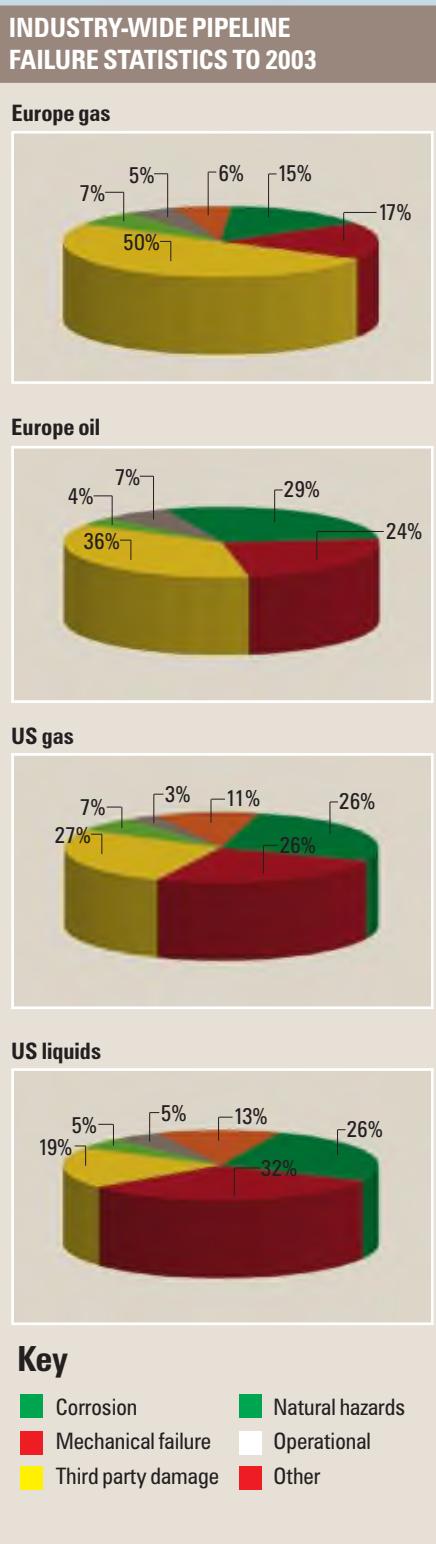
burrowing nearby by large families of inquisitive rabbits. Any leak, if undetected, can lead to injury or death of humans and wildlife; loss of product; operational downtime; environmental damage and financial loss. It can also shatter a company's reputation.

As part of a comprehensive pipeline integrity technology programme, BP is actively seeking new technologies to detect and monitor third party intrusion and ground movement, and to enhance leak detection. Now, in a development expected to have a major impact in the global pipeline sector, BP and Schlumberger, the Houston-based oilfield services group, have developed a pipeline condition monitoring system (PCMS) to detect and monitor external pipeline threats. Using fibre optic cables already present in many pipeline systems, its developers say the PCMS is the most effective and accurate system ever.

"Pipelines face numerous external threats that can lead to leaks, including ground heave, accidental damage or intentional third party interference," says BP pipelines adviser Norman Sanderson, who initiated and has

managed the development for the last four years. "With current technologies, small leaks are undetectable," he continues. "Traditional pipeline inspection methods used globally include people walking the line or riding along it on horseback, flying over perhaps every two weeks in a helicopter, or using internal monitoring systems to check integrity. These are time consuming and not that effective. In 2003 we launched a feasibility study to define whether fibre optics technology could be used to detect small to medium gas leaks and identify third party activities going on near pipelines, and came up with PCMS."

The system uses a combination of two Schlumberger technologies — Brillouin optical time domain reflectometry (Brillouin OTDR) and coherent rayleigh noise (CRN) — and optical fibre distributed sensors to simultaneously measure the temperature of the ground around a pipeline, fibre strain and vibration, all in real time. Under standard set-up conditions, temperature is continuously monitored, strain measured every 10 minutes, and acoustic signals every second. ►



Changes can indicate a threat or, in the case of a fall in ground temperature, a gas leak.

The PCMS, which also involved expertise from Southampton and Aston Universities in the UK, and the UK's National Grid as well as funding from the Department of Trade and Industry, is capable of monitoring between 100km and 200km (62 to 124 miles) of a pipeline's length in each direction. This can also be done from a single location and without the need for any electronics in the pipeline itself. Future developments are likely to extend this coverage capability.

Amazingly, the system can identify the exact nature of most threats, telling an operator if a heavy vehicle is approaching the pipeline, if activity such as excavation or illegal tapping is taking place, or if ground near the pipeline has shifted. The technology is so sensitive it can even differentiate between a cow and a person walking over a pipeline.

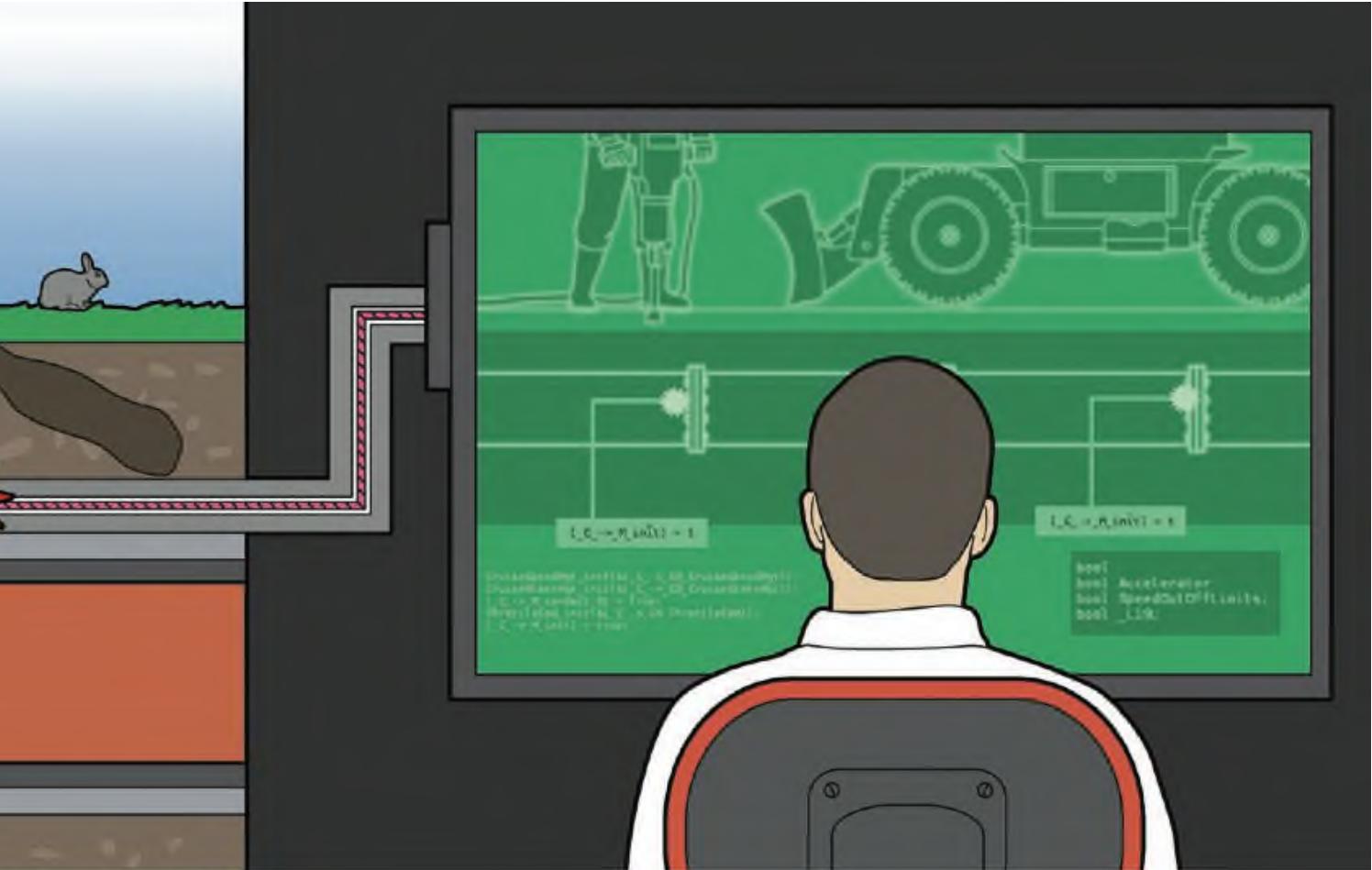
In addition to detecting leaks by monitoring for the acoustics of a gas escape and temperature changes, the PCMS is a leak prevention system, designed to warn an operator

of environmental changes close by, before pipeline damage occurs. "All external activities have a unique acoustic signature," says Sanderson. "The system analyzes the combination of outputs to provide the operator with an event recognition and location capability, allowing early response to be initiated."

That early response could include shutting down a pipeline or underpinning it to prevent buckling in the event of seismic disturbance.

Field trials of the PCMS took place in 2007. Looking for a site to test the use of fibre optic cables to monitor strain and ground movement, the development team took up an offer from the Forties Pipeline System (FPS) strategic performance unit for it to use spare land in the Kinneil terminal near Grangemouth, Scotland, UK. The FPS engineering team offered the land to enable the PCMS trials team to simulate third party intrusion and ground movement events, and collect field data to allow refinement of the system.

"The FPS team was very happy to host the trials," says Walter Kerr, engineering manager, North Sea infrastructure. "As the operator



## 'This is a total step-change in pipeline integrity management.'

Les Owen

of a 209-kilometre (130 miles) onshore pipeline, we were very interested in this technology. At one point, the FPS actually crosses a large park in which the annual *T in the Park* music festival is held and attracts crowds of 50,000 a day and their vehicles. Although we have exclusion zones and an emergency plan in place, there is always potential for third party encroachment and impact on the line."

And Malcolm Adamson, contracts and services representative for BP, adds: "The FPS goes through a lot of built-up areas, and where there is often farming and contractor activity. Although markers for the pipeline are in place, third parties are not always aware of where the pipeline is and do not always tell us what their work plans are."

In addition to conducting their own specially designed trials to monitor the effects on

fibre optic cables of simulated landslips and rock impacts, the PCMS team was able to monitor the impact of 50 cars a day driving in and out of a car park and over the test cables they had laid in the ground. The cables remain in place since the trials were completed and continue to provide valuable data.

No pipeline operator wants alarms going off every time a car or an innocent rabbit comes within the vicinity of a pipeline, so the PCMS system is so sophisticated it can be tailored to a pipeline's specific environment and set at different alarm thresholds. Andy Strong, Schlumberger's midstream oil and gas business manager, explains: "In an environment such as Alaska, an operator might choose to alarm every threat, whereas in a very built-up area you could program cars and people as an allowable event. The system will recognize what is normal, like a computer's anti-virus package, and we would provide updates."

The PCMS needs no maintenance and can usually be retrofitted without damaging existing pipelines. Besides energy pipelines, its developers expect it to be of huge benefit in

other applications, including perimeter fencing, utilities pipelines, border security and detecting ground heave around storage tanks. Although the technology has been developed with onshore pipelines in mind because of the acute interface between pipeline, people and environment, it also has great potential to be used offshore to detect seabed shifts that could endanger pipelines. To date, interest in the system has been very high and expectations are that PCMS will be widely taken up.

"The industry has not had this type of 24-7 monitoring before," says Les Owen, pipelines adviser on the integrity management team in Houston, US. "The traditional ways of monitoring pipelines are not very effective because as soon as you're out of sight that section of a line is not being monitored. Several detection systems are on the market already but have not proven as effective or accurate as this one."

"The real value is in the threat detection. If you promptly detect a threat, you have the opportunity to prevent pipeline damage or a leak. This is a total step-change in pipeline integrity management." ■

# Drinkwater hails the simple approach

**Business and country integration group vice president Anne Drinkwater believes BP's forward agenda will equip it perfectly to operate safely and simply, writes Adam Smith**

DESPITE A thoroughness that comes with a background in applied mathematics, Anne Drinkwater, business and country integration group vice president (GVP) for exploration and production, is driven by getting things done as simply and practically as possible.

This desire fits her new role in business and country integration where she is responsible for ensuring exploration and production (E&P) non-technical risks are fully mitigated in line with the company's forward agenda. Drinkwater's remit covers most E&P locations outside of North America, the North Sea, Russia, China and India.

Business and country integration extends beyond non-technical risks and provides insight on emerging external themes across countries, regions and economies, and assesses the impacts on BP's businesses, plans and strategy. In this area, Drinkwater finds herself offering guidance on cross-country and cross-segment business issues and opportunities—something that could become more common as external competition intensifies and international oil companies look for different and compelling offers.

For Drinkwater, non-technical risk is a broad field and includes such things as alignment with governments, environmental issues, the agendas of non-governmental organizations (NGOs), and the interests of the communities where BP operates. These issues must always be set in the context of BP's business and operations in any particular country.

She explains: "The key is having people in external affairs in each country who understand BP's business and the government needs and issues, and who are able to create the collaboration that allows business to thrive, while all the time staying in the space of a commercial organization."

"We are not a government or a philanthropic organization—we are a company and we need to make sure we fit in that space and then

align with what the government wants."

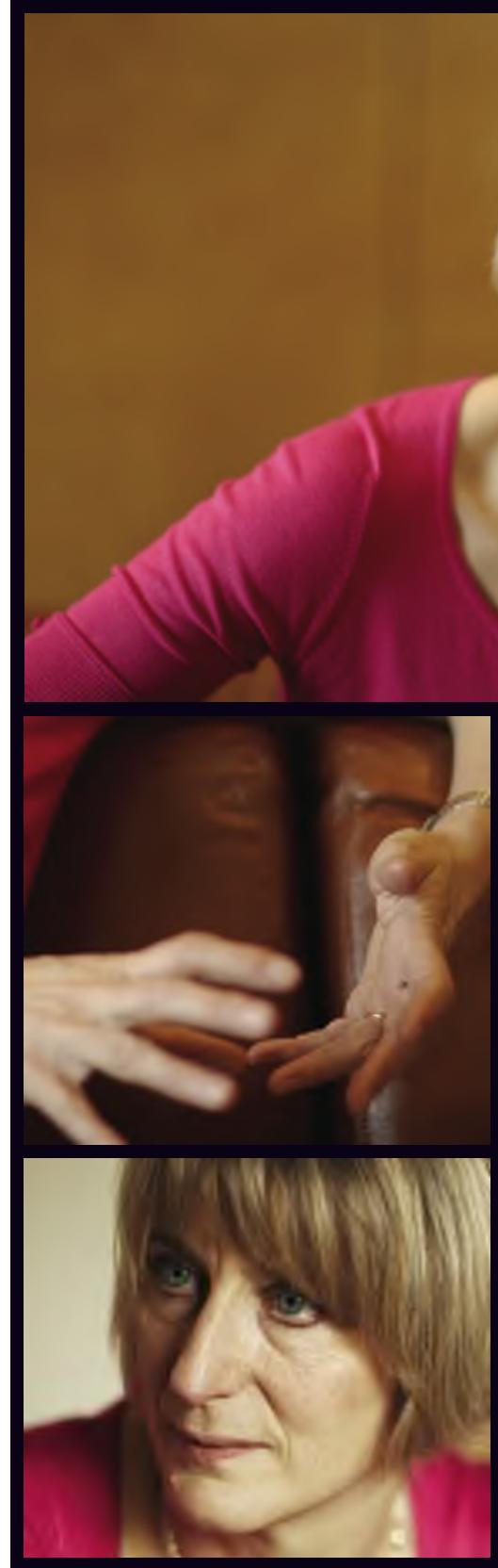
Her remit comes out of the move to fully embed communications and external affairs (C&EA) expertise into the strategic performance units (SPUs) and move away from the regional model—all part of the forward agenda. The move was just one of the changes designed to make BP a more direct, simple business.

She says: "The forward agenda allows the country teams to consolidate their role. We are now able to take external affairs within each country to the point where it has most relevance—where it interfaces with governments and customers. Accountability for external affairs and non-technical risk management is now fully embedded in the businesses. There aren't people in a central team who second-guess—the drive will come direct from the business."

With a family spanning four-generations and spread over a couple of continents, Drinkwater knows one of the keys to stable relationships, regardless of the environment, is balancing your needs in what may be a very different environment to the one you are accustomed to. And the former business unit leader and head of country for Indonesia believes such skills are vital to securing reliable business operations for BP in what are often highly-charged political climes.

She continues: "This role is one of making the whole greater than the sum of the parts—we work in a space between SPUs, who can do almost anything but need some help every now and again."

"I am not a political adviser—but I do have very practical experience of running businesses in different political, economic and social contexts. My aim is for everything we do in a non-technical space to be very practical, focused, and business-orientated. My expectation is that the people on the ground will have a way of both understanding and miti-





gating current risks, as well as detecting any emerging risks.

"I also believe that listening to the external world is something that is best done as close to where the action is happening as possible. But again, it is imperative that you listen in the context of the business activities we have, otherwise you will get drowned out by noise."

But Drinkwater believes that embracing business and personal challenges will ultimately enable BP to extend the spirit of 'silent running' championed by group chief executive Tony Hayward across all its activities.

She explains: "If I am doing the right thing, and we are all doing the right thing across the businesses, you will get to the point of silent running. This means that we will not be surprised by any non-technical issues—we will actually be able to see them coming and head them off."

It is the simplicity created by the forward agenda which appeals to Drinkwater, who believes the stripping back of a lot of the "central machinery that used to create a lot of smoke and noise" will enable BP to have a clearer external perspective—including what the competition is doing and therefore creating greater opportunity for success.

She says: "We do not need excessive assurance. We have a group of diverse and hugely experienced people on the ground with clear accountabilities—they understand what they need to do in terms of safe and reliable operations, and they are mindful of the non-technical risks inherent in their business.

"Success comes down to actually having people who can think broadly enough, engage broadly across their organization and engage broadly externally as well, harnessing the power of the entire organization.

"This is all simplification—we have taken away things like country plans, we have taken away a lot of the assurance steps and we've made it much clearer. We are selective about where we intervene and are working real problems—not writing briefs and memos."

While she can't put a dollar value on multi-faceted thinking, Drinkwater knows it is integral to successful delivery across BP's E&P portfolio. She concludes: "It's always important to ask that question: 'what have I missed?' It is important to have a laser-like focus on delivery—it's also important to have those moments to reflect more broadly on the external environment.

"The way we are structured now enables the segment executive team to do that. We have times when we are laser-like and we have the moments when we reflect more broadly." ■

GRAHAM TROTT

"OUR RUNTIME goal is today-plus-one, safely." That's how JP Russell, subsea adviser, sums up the operating philosophy of the people running BP's Na Kika oil and natural gas production platform in the Gulf of Mexico (GoM). Focusing on the here and now makes safety a priority, and the performance records—including runtime, or production without unscheduled interruptions—will come on their own.

Fixing attention on the near-term has achieved impressive long-term results. Na Kika's production efficiency of 97% is at world-class level and several percentage points above the point at which engineers calculated the facility would produce. Moreover, this efficiency comes in the face of challenges.

"We utilize production tie backs instead of direct vertical access wells or dry trees," says Russell. "As a result, system maintenance and procedures for returning equipment to service following a shutdown are more difficult."

Na Kika's high production efficiency stems from the use of a set of procedural tools contained in BP's production efficiency improvement programme. These include 'root cause failure analysis' that is designed to pinpoint and eliminate problems that lead to production shutdowns.

But Robert White, maintenance supervisor, offers a note of caution when describing how Na Kika recently solved a difficult problem: "Procedures themselves are not enough; it takes experienced human intervention as well."

The facility had completed 103 days without an unscheduled shutdown when a control panel which monitors equipment indicated a fault in the system and automatically stopped production. Technicians were able to correct the immediate problem but were unable to pinpoint the root cause. Na Kika resumed production and continued for an additional 123 days until another upset occurred.

"We believe in not giving up and keep after a problem until it's resolved," says White. "In this case a persistent electrical engineer, supported by other team members, discovered and fixed a hard-to-detect electrical grounding fault in a low-voltage system."

Another reason for the success is the lack of pressure from onshore managers to maintain output and solve problems rapidly, if not completely. "Houston gives us the space to solve issues and supports our belief that sustained runtimes are better than quick recovery," adds Paul Landry, offshore installation manager.

Na Kika's strong culture is apparent "from the moment you step aboard," according to

# Offering a solid platform to build on



**BP's Na Kika platform in the Gulf of Mexico is the epitome of the company's silent running tenet. Paula Kolmar looks at how safe operations have led to impressive efficiency**

Craig Wiggs, asset manager. He continues: "New employees get an immediate introduction to the Na Kika way of doing things and are told they will receive all the help needed to succeed. Though Na Kika has gone through changeovers in personnel over the years, this approach has remained successful."

The belief is that taking time to ensure tasks are done properly has benefits beyond smooth operations and well maintained equipment.

"Operating properly leads to operating safely—they reinforce each other," says Troy Aycock, operations lead technician.

Na Kika's safety record supports this belief. By March 2008, the facility had worked more than 1,380 days—nearly four years—with a recordable accident, making it the leader

among BP platforms in the Gulf of Mexico and among the best in the industry. The record is the product of a culture on Na Kika that puts safe operations ahead of other considerations.

"There are government regulations and BP regulations that are a step above what government requires," says lead technician Michael Pitre. "They're important but mean nothing unless people are committed to following them. From management on down, we all believe that if it's not safe, stop it. In the same way, we look out for each other so if the guy next to you is tired, we shut him down."

Workers are encouraged to question operations and discuss safety with supervisors. Those discussions begin with meetings each morning before the workday begins.



**BP's Na Kika platform, off the coast of New Orleans, is the company's largest producer in the Gulf of Mexico**

"We believe in involving everyone in these meetings so people take turns leading talk around a safety topic they choose," says Landry. "That gives people ownership and a sense they are all contributing to the effort. Safety is not about the numbers, it's about commitment and valuing people so if someone gets hurt we feel we have failed our obligation to protect."

Maintaining that attitude is difficult through 14-day on, 14-day off work schedules. Na Kika managers recognize this challenge.

"We plan carefully to make sure that simpler procedures are scheduled for the beginning of a work cycle when people are becoming reacquainted with the facility," continues White. "We ramp up to more high-impact

operations when people have settled in and are more mentally alert, and then return to a less challenging schedule when people begin to tire near the end of a two-week tour."

When a tour ends, Na Kika leaders like Pitre encourage workers to carry the safety approach home to reinforce offshore routines because "we want you and your families to be safe and that you come back to us."

Landry adds: "Safety is part of the greater Na Kika culture that values each person. We treat a vice president visiting the platform the same way as a member of the catering crew. When you have an environment of mutual respect and personnel accept the challenges as a contributor of success the numbers will speak for themselves." ■



#### **NA KIKA'S HIGH PRODUCTIVITY**

Na Kika's design led to it being named after an octopus god worshipped in the Gilbert Islands. The platform's central production facility is connected to a system of flow lines and risers that resemble tentacles. Na Kika has produced high volumes of oil from the Kepler, Ariel and Hershel fields, and natural gas from the Fourier and East Anstey fields.

Situated in around 1,920 metres (6,300 feet) of water about 225km (140 miles) southeast of New Orleans, Na Kika was built at a cost of \$1.3 billion as a joint venture of BP and Shell. A daily average of 75 workers help produce 78,000 barrels of oil and 270 million cubic feet of gas a day, making it the largest BP producer in the Gulf of Mexico.

# Keeping a low profile, keeping operations running

Oil and gas production in the Gulf of Mexico is dependent on personnel efficiently operating BP's platforms, drill ships and rigs. Getting workers and supplies offshore is the silent but critical part of the performance mix, as *Paula Kolmar* reports

SO MUCH of BP's hydrocarbon production comes from platforms in the Gulf of Mexico (GoM) that the logistics management group for deepwater assets is one of the largest in the worldwide industry. What it quietly accomplishes is key to BP performance.

Aviation and marine planning is a little known but vital function within BP that ensures staff are transported to the right platform at the right time, along with diesel, equipment and supplies required for operations. Like a well-tuned engine, the GoM logistics team based in Houston, US, runs so smoothly that its complexity and importance mostly go unnoticed.

Keith Hayles, manager of GoM logistics and materials management, knows the value of quiet operations. "Our philosophy is to serve the needs of our offshore customers safely, effectively and efficiently with no fanfare," he says.

The group manages the movement of all people and cargo travelling to and from BP's assets in the GoM. Whether by helicopter or boat, and whether to platforms near the shore or hundreds of miles across the sea, it is the logistics team that makes things happen.

Without the schedulers working closely with the asset teams to define vessel demand and prioritize operational needs, logistics would not be effective. According to Hayles: "The vast and complex level of co-ordination and communication is vital to the success of our offshore customers."

With more than six million man hours without a recordable incident and a stellar on-time arrival and departure record, it is clear why GoM logistics are under the radar—unless something bad happens, no one hears about them. They epitomize BP's 'silent running' approach day after day.

"We have built a business to meet all of BP's needs in the Gulf, from marine to aviation, under one umbrella team," continues Hayles. "In this way we create a synergy which maximizes our expertise and enables us to standardize policy for safety and efficiency across



## GULF OF MEXICO LOGISTICS

### Equipment in 2008

#### Aviation:

Sikorsky S-92A (18 Pax)	4
Sikorsky S76C+ (12 Pax)	3
American Eurocopter EC135P2 (5 Pax)	1
Bell Helicopters BH206L3 (5 Pax)	2
Sikorsky S61N (Search & Rescue)	1

#### Marine:

Vessels	25
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#### Shore base:

Shore bases	3
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### Statistics from 2007

#### Aviation:

Total flight hours	15,225
Takeoffs/landings	19,630
Passenger movements	141,600

#### Marine:

Platform approaches	9,600
Tonnes of deck cargo in/out	300,000
Gallons of diesel fuel transferred	45,000,000

Man hours worked without a recordable incident	+6,000,000
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Shore base:	
Crane Lifts	18,240

all offshore transportation."

BP does not own the helicopters or the boats, but it manages every aspect of equipment requirements, maintenance and operation. Hayles adds: "Our team consists of the top experts in each part of logistics hands-on management. Our aviation team leader, for example, is a very experienced pilot and formerly ran one of the largest helicopter service providers in the country. It's the same with our marine and shore base divisions.

"With the right expertise we are able to vigorously manage everything from crane operations that load cargo onto boats, to helicopter take offs and landings."

Shore base operations based in Fourchon, Louisiana, are integral to the co-ordination and effectiveness of the schedulers. The shore bases co-ordinate daily vessel movements and load cargo safely. Hayles adds: "They are the real hub of all logistics marine activity. In 2007 the team completed 18,000 crane lifts and 138,000 forklift movements."

And Virgil Russell, aviation team leader, confirms the safety-first approach applies across the board. He adds: "BP policy is embedded in our contractors before we will do business with them. We approve every pilot and every mechanic who is on board the helicopters, and our aviation team manages the maintenance and condition of each helicopter as well as overseeing heliport operations."

BP's logistics team has raised the bar when it comes to moving people and materials



BP's Gulf of Mexico logistics team operates out of its Houston, Texas, headquarters

around the GoM. "We have become the gold standard that the rest of the industry aspires to meet," asserts Hayles. "We do not compromise on safety or efficiency in serving the needs of our customers."

BP's deepwater assets represent the bulk of where the logistical efforts are focused. As hydrocarbons are discovered further out in the Gulf, Hayles and Russell continue to look for ways to improve and enhance service. Logistics currently manages the transport of cargo, supplies and people about 400km (250 miles) to the *Discoverer Spirit* drillship in the GoM from the heliport in Houma, Louisiana.

Challenging times lie ahead as deeper

discoveries are made. With this vision in mind, Hayles' team began preparing to exceed expectations several years ago.

In 2004, each helicopter and boat was replaced with the safest, most efficient, cutting edge models on the market. Russell, aviation team leader, rebuilt the fleet of helicopters to the highest standard in the industry.

Hayles concludes: "BP continues exploring and building in the Gulf. Alongside, the GoM logistics team continues to push the envelope of excellence in safety and effective resource delivery, looking ahead to anticipate the needs of the future. We intend to remain 'silent runners' setting industry standards at the highest possible levels." ■

## NEWS IN BRIEF

### US

#### Kodiak discovery

BP has announced an oil discovery in its Kodiak prospect in the Gulf of Mexico. The well, which is located in the Mississippi Canyon block 771 around 95km (60 miles) off the Louisiana coast, is in about 1,500 metres (5,000 feet) of water. The well was drilled to a total depth of 9,494 metres (31,150 feet) and found around 152 metres (500 feet) of hydrocarbon-bearing sands in the middle and lower Miocene reserves. Andy Inglis, BP chief executive of exploration and production, hailed the discovery, saying: "This discovery, in the vicinity of our 2003 Tubular Bells discovery, further strengthens BP's resource base in the Gulf of Mexico and has the potential to become an important new source of production for the US."

### North Sea

#### Book prize

A book charting the 25-year anniversary of BP's Valhall field has won a top award. *LF6A: Valhall at 25* won an excellence award in the multilingual communication category at the Communicators in Business awards. It will now go on to be further scrutinized by judges as they pick a 'best in class' publication. The judges said the book—which takes its name from the radio call sign for the field—had an "honest approach which is sustained throughout". Valhall is a demanding field that has been under continuous development since start-up in 1982. It will probably be on-stream in 2050 and in 2010 the field will start production from a new field centre.

### US

#### Culture message

BP exploration and production chief executive Andy Inglis (pictured) told an Alaska town hall that the company needed a deep cultural change from the top down, as well as a



simplification of business operations.

Inglis told the 27 March audience that BP has a wealth of opportunities across the world but much of the firm's future success depends on its ability to execute safe and reliable operations. He said: "Without a deeply embedded culture of safety, operations integrity and accountability, you cannot effect even the most sound strategy."

### US

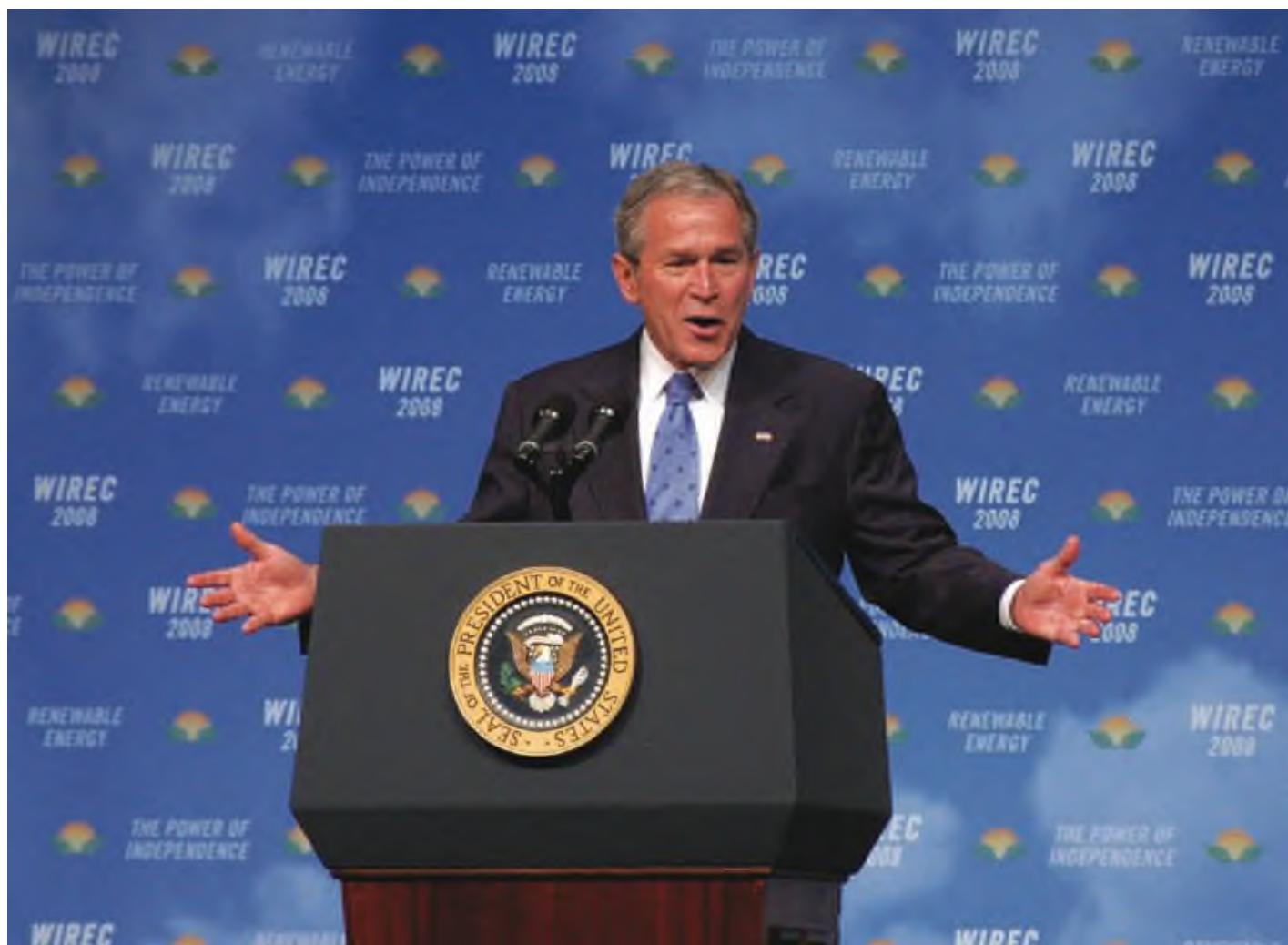
#### Block bidding

Two federal sales of offshore oil and natural gas leases in the eastern and central Gulf of Mexico attracted more than \$3.7 billion in bids. BP was the highest bidder on 63 blocks offered as part of the 206 central Gulf lease sales announced in New Orleans, Louisiana. Its total investment was about \$340 million (gross).



# Green energy's political test

BP group chief executive Tony Hayward has taken the company's green agenda to the US government and the world's top firms



**US president George Bush addresses the WIREC audience as delegates try to analyze the cost and benefits of renewable forms of energy**

**W**HEN MORE than 3,000 delegates from 120 countries converged on Washington DC, in early March to attend the Washington International Renewable Energy Conference (WIREC), smart ideas were in abundance.

As the world's largest high-level conference on alternative energy, WIREC brought together representatives from government—including US president George Bush—and business to analyze the costs and benefits of deploying renewable energy technology worldwide.

"If we act now, we will be able to smooth the transition to a lower carbon economy of the future," BP group chief executive Tony Hayward said in his address to the conference. Stressing the need for speed, he added: "Energy security and climate change are two of the greatest challenges facing us today. There has been quite a lot of talk about them in the last few years. Now is the time for action."

Focusing on an International Energy Agency projection that the world will require 50% more energy in just 20 years, Hayward said a huge amount of alternative energy research is needed now and reminded delegates that BP is America's largest energy investor, investing \$30 billion over the past six years and planning to devote \$30 billion more over the next six years to help bring energy security to the US. Wind, solar, second-generation biofuels, carbon capture and storage, and hydrogen are all arenas in which BP is investing at a rate of more than \$1 billion a year.

Still, there's no way that BP can do it alone. As Hayward put it: "We are proud of these initiatives. But even though 'clean tech' is growing very fast, let's be honest: the scale at which the industry is conducting projects today is not going to have much impact on the energy market of the future. For that, we need sus-

tained investment on a massive scale. A step change of that nature will require sound energy and environmental policies from governments worldwide."

Hayward proposed two major policy initiatives which, while daunting, are necessary to move alternative energy to the mainstream: first, the evolution of a carbon marketplace that fairly reflects the true cost to the climate of greenhouse gas emissions; and secondly, a system of incentives to accelerate new technology and drive down its cost faster than would otherwise be the case.

Hayward has proposed a cap and trade system for greenhouse gas emissions, where governments decide on a level of emissions reductions and then release permits to emitters to achieve that level. "As a businessman, I am in favour of market-based solutions because I have seen how powerful they can be in practice," he said, adding that a cap and trade ▶

system is already running with some success in the European Union, which has an emissions trading system.

BP Alternative Energy vice president and chief executive officer Vivienne Cox, who also spoke at WIREC, echoed Hayward's position. "Maintaining momentum depends on both policymakers and businesses taking accountability and taking action," she said.

"There is an assumption that a price for carbon is a long way off—that there is not the political will or that the societal challenges are too great. But what is inescapable is that a price for carbon is going to be a fundamental part of the future of energy, and we must prepare for that eventuality."

**Subsidy stance:** As for incentives, Hayward said that while he was generally against subsidies, he did believe public good could come from bringing forward the development and deployment of low carbon technologies, much as public-private partnerships enabled the construction of early nuclear reactors.

He added: "The purpose of any incentive should be to kick-start the introduction of technologies, to accelerate them, and to drive down their costs. But any incentive regime needs to be carefully designed and, critically, should be transitional in nature. Properly designed incentives should taper away over time, in order to encourage and speed up the normal cycle that companies like BP go through."

But are governments ready to take the plunge? Bill Gerwing, BP America general manager of regulatory affairs, says not to expect significant progress in the near future.

"The reality is that jumping from nothing to some global agreement that has money on the table isn't likely any time soon—we're going to have a domestic programme first," says Gerwing.

But that may not be likely in the short term. "It's about the economy," he continues. "If the average man on the street feels like he's getting hit by additional charges from every direction, it's not going to fly politically; any additional cost put into the system will ultimately be paid for by consumers."

Gerwing also notes that legislation doesn't necessarily mean regulation. Laws could be passed, but any regulatory phase could take three to four years. He continues: "In fact, if the regulations were written that fast it would be a record—they'll probably fill a book six to twelve inches thick."

Gerwing's biggest concern is that carbon emissions permits will ultimately be rolled out on an industry-by-industry basis rather than



Delegates take a closer look at a BP Alternative Energy display at the WIREC conference

in a single comprehensive sweep, thereby adding years of confusion to the process.

Rachel Miller, BP director of federal affairs, who also attended WIREC, detects domestic political reluctance to dive into an international cap and trade system. She says: "Politicians may feel like we're going to go into this without knowing whether China or India are going to do anything, so our participation may drag down our economy without ultimately helping to address global climate change."

Still, Miller, who knows how Washington

works, sees hope beyond the 2008 election cycle. "There's a big challenge in getting anything done this year," she adds. "I think as the next president, whoever it is, comes in, it'll be much more likely to get things done, perhaps in the 2009 to 2010 time period."

And as for an international system, she says: "If you have a president who is committed to working on the climate change issue, it's more likely that the US will take a leadership role and become more engaged on the international scene, something we haven't done for the past eight years." ■

# China eyes first solar city

BP Solar's innovative Solar Cities programme in Australia has attracted a lot of admirers, including the world's fastest-growing nation. *Vicki Hammond* reports on its new Chinese role

THE CHINESE city of Weihai is on its way to becoming the largest solar city in the world—and setting the standards for those that follow—with the help and expertise of BP Solar.

BP Solar, Australia's market leader, will be responsible for taking the Solar Cities concept to China and will form part of the team responsible for managing the project's feasibility study.

The principle behind the Solar Cities concept is to show how solar power can address a city's peak energy demands, reduce the requirement for investment in electricity infrastructure, and cut carbon emissions.

Brooke Miller, regional director of BP Solar Australasia, says the experience gained in Australia's Solar Cities programme will be used to develop a comprehensive roadmap which will be used to assist model cities in China to address energy challenges both now and in the future.

She explains: "Today, almost every city,

in every urbanized country in the world is facing the growing challenge of meeting its peak energy needs, while reducing its greenhouse gas emissions."

"Australia has been at the forefront of developing new technologies and innovative programmes that can address this challenge. This project aims to deploy solar technologies at commercial scale, providing a practical example of how bilateral agreements can provide a critical first step in developing a low carbon future."

And the project to reduce greenhouse gas emissions and the carbon footprint of Weihai also got a central government boost, with Australian prime minister Kevin Rudd lending his support to the plan.

From Blacktown in the western suburbs of Sydney, across to Alice Springs in the Northern Territory and to Adelaide in South Australia, BP Solar has gained experience in developing successful Solar Cities projects throughout Australia.

But the northeastern Chinese city of Weihai will be a very different proposition and a challenge for BP Solar, according to Miller. She adds: "With a population that dramatically increases in summer due to its popularity as a tourist destination, Weihai has its own distinct peak power challenges."

"Using technology that is available today, the opportunity exists to develop a truly unique solar city model that not only meets these challenges but transforms Weihai into a showcase for other Chinese cities and indeed the world."

"As a direct consequence of the federal government's support for the Solar Cities concept, seven Australian cities will demonstrate how the power of the sun can address their peak energy challenges, reduce the requirement for investment in electricity infrastructure and cut emissions."

"We look forward to completing the feasibility study and adding the city of Weihai to this list." ■

## NEWS IN BRIEF

### US

#### Malone testifies

Increasing taxes on oil and gas to subsidize more expensive forms of renewable and alternative energy will result in less US energy investment, tighter energy markets and, potentially, higher prices at the gasoline pump, BP America chairman and president Bob Malone said in testimony before the US House of Representatives select committee on energy independence and global warming. Malone acknowledged the hardships high gasoline prices are causing US consumers and urged congress pursue policies that encourage production of all forms of energy. "We are committed to the growth of our renewable and alternative energy businesses," he said. "But the hard truth is that even with major improvements in energy efficiency and the rapid growth of

solar, wind and biofuels, the US will consume more oil, natural gas and coal in 2030 than it does today." During his testimony, Malone reinforced BP's support for the creation of a single, mandatory US greenhouse gas emissions registry and a market-based price for carbon to encourage conservation, drive energy efficiency and address global warming.

### Global

#### Investment milestone

BP announced that its total investment in its Alternative Energy business will hit \$1.5 billion by the end of 2008. Speaking at the company's annual general meeting in London, UK, on 17 April, group chief executive Tony Hayward told shareholders: "Alternative Energy is an innovative business, still in the investment phase." He added: "Our objective over the course of 2008 and beyond is to

create equity value for our shareholders by raising this business's visibility. We will examine a number of options, including joint ventures, partnerships, and even, where appropriate, partial public offerings."

### UAE

#### Qatar renewables

BP is in talks with Qatar Petroleum to kick-start the country's renewable energy assets, according to the Middle East & North Africa Financial Network. The organization reports the pair are exploring the possibilities of solar to power in the Emirate state. Qatar plans to boost its annual liquefied natural gas (LNG) capacity by eight million tonnes to 39 million tonnes by the end of 2008. Meanwhile, Bloomberg quoted Steve Peacock, BP president for the Middle East and South Asia, as saying: "We are still in discussions about what could be

possible. We could help with new gas exploration and alternative forms of energy."

### Global

#### Partner's assurance

D1 Oils, BP's biofuels partner, is closing its Middlesbrough, UK, refinery because it cannot compete against heavily-subsidised producers in the US, according to a variety of news sources. Elliott Mannis, D1 Oils chief executive, said the firm would now concentrate on its joint venture with BP, D1-BP, which was launched in October last year. Mannis said the company was now going to refocus its business on growing the non-edible crop jatropha with BP in India, Africa and Asia. D1 Oils is the exclusive supplier of jatropha to the project and it will also continue to work on developing other plants for biofuel.

# A stern test of character

Perseverance has paid off for BP environmental scientist Alexandra Rickham who has booked her place at this year's Beijing Paralympics, and is hoping to bring home a medal



**A**THLETES WITH ambitions to represent their country in the Olympics might well expect to spend years training in order to make the grade. Remarkably, BP environmental scientist Alexandra Rickham has been selected for the Great Britain squad for China 2008 just six months after meeting her sailing partner.

However, Alexandra's circumstances are very different to the household names likely to be at the forefront of media coverage for this year's Beijing games. The 26-year-old will be taking part in the inaugural Skiff Universal Design (SKUD) 18 sailing class competition at the Paralympic Games—an achievement which is testament to her courage and determination to overcome the legacy of a childhood accident which left her paralysed.

Alexandra was 13 years old when she broke her neck in a shallow diving accident during a holiday in Jamaica, where she has family. The injury was so severe that Alexandra was left tetraplegic, meaning she has some paralysis in all four limbs.

She underwent medical treatment in England and Cuba, and during a rehabilitation programme in the US she enjoyed sailing for the first time. But it was many years before she was able to develop her love of the sport.

"During rehab in Miami, they took us out sailing one day and that is where my interest arose from," says Alexandra, who lives in Epsom, in the southeast of England. "I had always been into sports before my accident and had done a lot of competitive equestrian events, swimming and tennis. But when I got back to school I didn't have much time for sports, and then I went on to university."

In 2006, as she studied for a masters degree in environmental technology, Alexandra's interest in sailing was rekindled when a decision was taken by the International Paralympic Committee to introduce a new class to the games—the SKUD 18, a two-person keelboat. The intention was to open up the class to those with more severe disabilities and, as there was also a desire to get more women competing, a stipulation was written into the rules that all crews should include at least one female member.

Alexandra says: "I had just decided to give it a go again when this guy I had met previously said he was looking for a severely disabled woman to train with him as a helm in a Paralympic campaign

"That was more than two years ago and I sailed with him for eight months." Unfortunately their hopes of sailing competitively were dashed when they failed to secure

## SALIENT FACTS



Alexandra is hoping for a Paralympic medal

The Paralympic sailing event where Alexandra will be competing uses a new type of vessel called a SKUD, based on an open type of boat used by Olympic sailors.

It is around 5.8metres (19 feet) long, wide-bodied, keeled, to help avoid the possibility of it rolling, and both crew members have to be strapped into seats on board. That is a vital detail which helps to introduce an element of fairness between competitors with different levels of disability, by effectively placing everyone on the same level. While Alexandra is classed as having a severe disability, her sailing partner Niki Birrell is in the most minor category under Paralympic rules.

Alexandra and Niki will compete in one of three Paralympic sailing classes, at a course in Qingdao, East China, two hours away from Beijing by air. They can expect to spend six days sailing, with up to 12 individual races.

Although they are funded by the British Paralympic Association the team is looking for further sponsorship.

The main sponsor of the Great Britain team in both the Olympic and Paralympic Games is investment company Skandia. You can sign up for their supporters' club for free at [www.skandiateamgbr.com](http://www.skandiateamgbr.com).

The Beijing 2008 Paralympic Games opens on 6 September and closes on 17 September. The sailing events will take place at the Qingdao Olympic Sailing Centre from 8 September, with the finals scheduled for 13 September.

sponsorship, and Alexandra decided to concentrate on her career. She was soon employed by BP, where she had some previous gap-year experience. "I was deciding to really focus on work, although I had said anyone looking for a partner should get in touch," she says.

A year later Alexandra received a call from the Royal Yachting Association about Niki Birrell, who has cerebral palsy but had previously been competing in able-

bodied sailing competitions.

"They asked if I was interested in sailing with him and I started in October last year," she says. "It has been totally full-on since then. I have been lucky in the sense that when I told BP, they said 'go for it'. I was working through the week, then at weekends I was sailing out of Weymouth, Dorset."

Then, in December last year, Alexandra took a break from her job, based in Sunbury, UK, to travel to the US to take part in selection events. "That is when we made our strides forward," she says. "The first event, the Miami OCR [Olympic Classes Regatta], was at the end of January and our main objective was to beat the two other British teams. We did so and came fifth. It was exactly what we needed. We were learning lots about the boat and about each other."

Two months later, at the US Disabled Open Midwinters regatta in Florida, Alexandra and Niki took the bronze medal, securing their place at the Paralympics.

Alexandra's success has meant she has had to put her professional career on hold for longer than originally expected. She and Niki now divide their time between practising on the water, studying tactics and physical training, which ensures they are able to cope with the demands of races which can last several hours each.

They will travel to China for test races in late May and go back again later in the summer to prepare for the games in September.

Alexandra, who will celebrate her 27th birthday during the games, says: "As someone who has been obsessed with the Olympics my entire life, it's like all my Christmases have come at once. Now I just need a shiny, preferably gold, present to top it all off!"

She adds: "Sailing is liberating. I think it gives everyone a sense of freedom, whether disabled or able-bodied. And it is great when you go really fast. When you get an adrenaline rush, it always makes things better."

Chief executive of the Great Britain Paralympic team, Phil Lane, says: "With the SKUD class making its debut in the Games in September we are delighted to be taking a larger number of sailors to the games to contend for more medals than ever before, and we hope to see the squad live up to sailing's reputation in Britain as one of the country's most successful sports."

He adds: "To be selected for a Paralympic Games is the pinnacle of an athlete's career and an achievement that these athletes should be proud of. We wish them the best of luck over the next few months as they put in their final preparations for the Games." ■

# The BP staff who have booked their places in publishing history

A combination of imagination and determination has led four BP employees to fulfil their ambition of securing book deals, as *Matt Davis* discovers

ACHIEVING TARGETS at work is something all employees strive for, but to reach equal levels of success in a hobby or pastime is something to be really proud of, as Russ Whitfield recently discovered when his local bookstore held a special event to mark the launch of his first novel.

Russ, who is the content editor of BP.com, was surprised and delighted to be met at the event in London, UK, by a queue of fans all wanting signed copies of *Gladiatrix*, his work of historic fiction about a female gladiator in Asia Minor.

He is equally pleased that his first effort, which has been published by Myrmidon Books, has already been endorsed by well-known historical fiction writers Simon Scarrow and Scott Oden.

"People have been really nice about the book, which is so encouraging," he says. "I have had e-mails from people who have really enjoyed it, and the bookshops have already put in more orders."

"The event at the bookshop was a bit nerve-racking because they made it into a Roman-themed afternoon and I was asked to give a talk, but it went really well."

Russ's book, which he began writing in 2002 after taking inspiration from a television show about gladiators, debuted with a print run of 10,000 copies, and St Martin's Press recently acquired the book's US rights.

He got up early to write it for four years, between 4am and 6am most mornings, before going to work for BP at Sunbury, and he is already working on a sequel.

"I only told my colleagues about the book once I'd got the publishing deal," Russ admits. "I was never planning to do a sequel, but I am going to write one now—and I hope I will write it a lot faster than my first one!"

"We're all really excited for Russ," says Joe Massucci, BP's US general manager of communications, based in Houston, Texas. Joe is an experienced author who has had two books published over the last nine years.

"It's like winning the lottery or something like that," he says, when asked to describe the

experience of first finding a publisher.

Joe's idea for his first book, *Code Alpha*, came from working for BP. "The climax of the book takes place aboard an oil tanker, and I got that idea from touring one," he says. "I was working in crisis management in those days, thinking about the possible impact of an oil spill or something like that—how the company might be at risk if something happened."

He adds: "Writing fiction is just a wonder-

## BP STAFF AND THEIR BOOKS



**Joe Massucci and *Code Alpha***



**Lorne Gifford and *The Andaman Express***



**Trinia James and *Mpire***



ful outlet for your imagination. At BP everything is very technical and black and white, and as controlled as we can make it. Whereas in fiction, anything is possible."

Joe has since written three more books, including a sequel to *Code Alpha* called *The Millennium Project*, and two others that are currently being marketed by his agent.

Lorne Gifford, a subsea engineer for BP Angola, got the idea for his upcoming novel, *The Andaman Express*, when he was helping out at school careers fairs. He realized most children didn't know what professional engineers did, or how interesting a career engineering was, and suggested to the famous novelist Ian Rankin that he write a thriller based on the oil industry.

"His response was that writing a book wasn't really all that hard and that if I had a good story line then I should do it myself," says Lorne. "Hey presto—many years and countless drafts later here we are."

**'Writing fiction is just a wonderful outlet for your imagination. At BP everything is very technical and as controlled as we can make it. Whereas in fiction, anything is possible.'**

**Joe Massucci**

Lorne's book, set in South East Asia, revolves around the control of natural gas production there.

"I've made the plot line as realistic as possible," he says. "It fits with the politics and technical aspects of energy production and consumption in the region."

Like Lorne, BP organizational capability analyst Trinia James has based her novel on her experiences in the workplace, albeit in a slightly more escapist sense.

Based in Houston, Texas, Trinia began writing her *Mpire* trilogy in 2004, after being made redundant from another firm,



RICHARD PRICE

Russ Whitfield at the launch event for his debut novel, *Gladiatrix*

having just given birth to her son.

"I watched all 15 years of the TV show *Law and Order*," she says. "Then I just decided to turn off the TV and write something better."

With her newborn son in her lap, it took Trinia a year to complete a racy transatlantic trilogy about a corporate Texan dynasty, before landing a job at BP. Once there, Trinia found her new colleagues supportive of her ambition to write novels, particularly when it came to making sure her dialogue was authentic.

"One of my bosses is Irish," she says. "So he would help me out by saying 'you have to put

this Irish phrase in the book,' and then I would go for meetings in England and do research there to make sure the English sections of the book were authentic."

The first novel in Trinia's trilogy, *In Search Of The Lost*, was printed in November by Kendall Publication. She received 317 rejec-

**'Thick skin and an inability to accept no as an answer are the main requirements for an author.'**

Lorne Gifford

## TOP TIPS FROM BP EMPLOYEES ON BECOMING A PUBLISHED AUTHOR

### 1 Find your time to write.

"People work differently," says Russ Whitfield. "I'm a morning person, whereas other writers like to work in the middle of the night."

"Usually the last hour of the day when everything is getting quiet is when I like to write," says Joe Massucci.

"I was working for another oil company as an offshore construction manager and spent a six month stint offshore with very few trips home," says Lorne Gifford. "Isolated from the normal distractions of children, household jobs and TV I found it a good way of escaping the 24-7 nature of offshore life."

"I worked best between one and two o'clock in the morning," says Trinia James.

### 2 Finish your book, for one reason or another.

"Nearly everybody is starting to write a book, but anyone who says they're just writing for the love of it is probably not telling the whole truth," says Russ. "We almost all want to see it on a shelf somewhere."

"I was just writing for my own enjoyment," insists Trinia. "Then after a year my friends said 'this is good' so I decided to complete it."

### 3 Learn to handle rejection.

"Thick skin and an inability to accept no as a suitable answer are the main requirements for an author," says Lorne.

"I used to post my rejections up on the wall," laughs Trinia.

"I sent *Gladiatrix* to 30 publishers before I heard back," says Russ. "In fact the morning I decided to stop sending it out to publishers I got the phone call from Myrmidon asking me to dinner to talk about the book. It felt like fate."

tion letters before eventually finding a publisher willing to take it, and admits that when she got the 'yes' letter "I cried".

The heady world of book signings and publicists may be a far cry from routine employment at BP, but all four authors credit their employer for a role in their success, and agree it would take a great deal to force them to consider giving up their jobs to turn author, full time.

"I'm not just toeing the employee line—I love working for BP," says Russ. "I've no plans to quit the day job just yet, unless of course Ridley Scott calls me with a movie offer tomorrow, which I think is unlikely." ■

# Burning the midnight oil

To raise funds for the ongoing fight against breast cancer, and as a tribute to loved ones, six BP employees will complete a night marathon in Scotland, UK, writes *Lucy Harvey*

SIX BP employees plan to walk a midnight marathon to raise money for cancer research in memory of loved ones and as a tribute to those currently battling the disease.

The group will take part in the 10th Edinburgh Moonwalk, an organized 26-mile walk through Scotland's capital city, which was developed as a result of overwhelming demand for the London Marathon.

BP's team is led by *BP Magazine* editor Lisa Davison, who lost her 58-year-old stepfather David Welsh to cancer last year, just three months after he was first diagnosed with the disease. Lisa says: "I think losing someone close for any reason makes you stop and think about the way you live, and makes you want to make a difference. I have been talking about running a marathon for years, and since I don't think the knees can take it anymore this seemed like the next best thing!"

Lisa will be joined by her mum Andrea, sister Nicola, and five BP colleagues—news publications and executive events manager Barbara Peen, event managers Nancy John and Paula De Sousa, exploration and production external affairs adviser Clare Bebbington, and press office and distribution administrator, Carolyn Copland.



The 'BP loonies' include (from left to right) Lisa Davison, Paula De Sousa, Nancy John, Barbara Peen and Carolyn Copland, who hope to raise lots of money for cancer charities through their efforts

Carolyn is walking in recognition of her best friend Erica Jones' recent battle with breast cancer, and in memory of her father, Walter Chignell, a Second World War veteran who died from cancer six months ago.

Carolyn says: "My father was given tremendous care while he was ill and he also participated in a research programme, so hopefully his course of treatment may be beneficial to future sufferers. Unbelievably

many of these research programmes are funded by charities so it is important we all try to give a little back."

She adds: "For me Lisa's idea of doing the Moonwalk came at the right time. It's given me something to focus on and remain positive about, and as the event takes place on father's day it is a truly fitting memorial." ■

*To sponsor the team's marathon effort visit [www.justgiving.com/bploonies](http://www.justgiving.com/bploonies).*

## NEWS IN BRIEF

### US

#### Intern milestone

BP's Texas City Refinery has celebrated enrolling its 100th process technology intern. The programme is a partnership between BP, United Steel Workers and College of the Mainland, San Jacinto College, Alvin Community College, Houston Community College and Lee College, where the students are enrolled in the process technology associates applied science degree programmes. Students who work at the site learn first-hand about the oil industry and earn credits toward their college degrees. Ten interns are currently enrolled in the programme and will be honoured as a group. George Ayala, interim learning and development manager

said: "Our internship programme has been hugely successful, and this is a significant milestone for us."

### US

#### Snowboarding champ

BP's Casey Smith has achieved more success in the world of competitive snowboarding. For the second year running, Casey, who is 53-years-old, won first prize in the division for men aged 50-54 during the National Standard Race (Nastar) National Championships, held at the Steamboat Springs, Colorado. The Houston-based infrastructure design leader for BP America's 21st century petrotechnical development programme also set a new personal speed record.

### US

#### Degree honours

BP's chief scientist Steven Koonin, (pictured) has been awarded an honorary degree from Michigan State University (MSU). Lou Simon, MSU President, says: "Koonin's work in global environmental sciences is

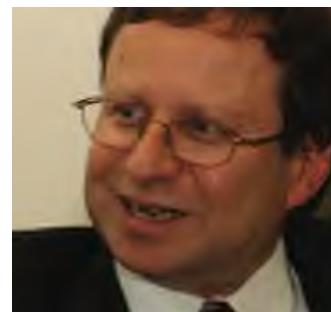
helping to inform research in

universities all over the world on the development of sustainable and renewable energy sources. His research will enable future generations to take the next steps in preserving the environment."

### US

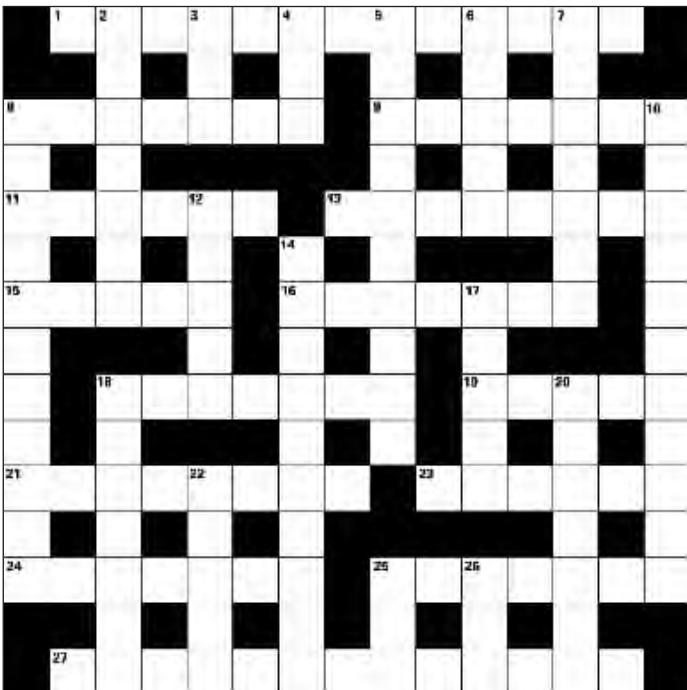
#### Pedal power

A BP team with more than 700 members completed the BP MS 150—the 24th annual Lone Star chapter's bike ride from Houston to Austin in Texas. Nearly 13,000 riders took part in the race, which is expected to raise a total \$13 million for multiple sclerosis research and services. The BP team was supported by more than 200 volunteers along the course.



# Endgame

## HORIZON CROSSWORD



For your chance to win a stylish Cross pen, simply fill in the answers and return to *Horizon* crossword, 1 St James's Square, London SW1Y 4PD, United Kingdom by 27 June 2008.

### Across

- 1 He succeeded Richard Harris as Dumbledore (7,6)
- 8 Rocky islet associated with ocean racing (7)
- 9 Far from moderate (7)
- 11 Tiny spots (6)
- 13 This coast runs north from Walvis Bay (8)
- 15 Mammary gland of female cattle (5)
- 16 Any one of the bones of the fingers and toes (7)
- 18 Its capital is Munich (7)
- 19 A Muslim official or governor (5)
- 21 A delicate aphid-eating insect (8)
- 23 Not genuine (6)
- 24 Italian composer (1858-1924) (7)
- 25 Awkwardly energetic like a young horse? (7)
- 27 Jazz group often found following the news (7,6)

### Down

- 2 As an alternative or substitute (7)
- 3 Warlike Asiatic nomad (3)
- 4 "I ... the air promise-crammed," (*Hamlet*) (3)
- 5 Tomatoes, olives and feta cheese (5,5)
- 6 Much of *Pyscho* is set in one (5)
- 7 Make excessive demands on (7)
- 8 High-jump technique (7,4)
- 10 Swiss-born American composer (1880-1959) (6,5)
- 12 Former name of Vyatka (5)
- 14 The Sorcerer had one (10)
- 17 This could be horribilis or mirabilis (5)
- 18 Stolen in De Sica's 1948 film (7)
- 20 Jacqueline Lee ..... was born in 1929 (7)
- 22 Card game sometimes involving a dummy (5)
- 25 An aggressive dog owned by a contemptible man? (3)
- 26 One circuit of a racetrack (3)

### Solutions for issue two were:

**Across:** 1 Richthofen; 9 Blur; 10 Tweedledum; 11 Impede; 12 Munster; 15 Air Bags; 16 Norma; 17 Lynx; 18 Flea; 19 Scott; 21 Estelle; 22 Iron Age; 24 Infant; 27 Evanescence; 28 Ravi; 29 Smart Money. **Down:** 2 Iowa; 3 Hyenas; 4 Halogen; 5 Fado; 6 Namibia; 7 Blue Dahlia; 8 Green Snake; 12 Millefiori; 13 Nine-To-Five; 14 Royce; 15 Amati; 19 Slaters; 20 Trident; 23 Nuncio; 25 Nana; 26 Ante. The winner was Mr. A. Preece, Swansea, UK.

## DILBERT BY SCOTT ADAMS



- a)  oil
- b)  natural gas
- c)  wind
- d)  solar
- e)  biofuels
-  f) all of the above



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AVENUE OF THE AMERICAS, 5TH FLOOR  
NEW YORK • NY 10018  
EL: 212-679-3173 • FAX: 212-679-5777

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 This advertisement prepared by: **Ogilvy & Mather**  
 To appear in: **Horizon Magazine**  
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 Scale: **1:1** Actual Trim: **Same as Trim** Gutter: **None**  
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