



# **SUSTAINABILITY SUMMARY**

ROYAL DUTCH SHELL PLC  
SUSTAINABILITY SUMMARY 2010

# INTRODUCTION FROM THE CEO



“WELCOME TO THE SHELL SUSTAINABILITY SUMMARY FOR 2010, AN OVERVIEW OF THE SHELL SUSTAINABILITY REPORT 2010.”

In this summary we show how consideration for safety, the environment and communities lies at the core of our operations and the development of our future energy projects.

The event that dominated the year for our industry showed the critical importance of getting our approach to safety right. The *BP Deepwater Horizon* incident in the Gulf of Mexico and the oil spill that followed became an environmental disaster that affected communities. But it began as a tragic accident: 11 people died, and others were seriously injured.

Safety has always been the first priority at Shell. A major incident like *Deepwater Horizon* serves as a warning to all to guard against complacency. I believe Shell's technical expertise, safety culture and rigorous global standards demonstrate that we are capable of operating responsibly, however challenging the conditions.

With the world now out of recession, energy demand is again increasing. All energy sources will be needed to meet this demand, but in the decades ahead the bulk of the world's energy is expected to continue to come from fossil fuels. Producing oil and gas from deep waters will remain crucial. These resources are a vital part of the secure and diverse supplies of energy the world will need, as are energy resources from other technically challenging environments.

Shell's responsible approach and continued investment in technology and innovation will help us to deliver this energy.

Tackling climate change remains urgent and requires action by governments, industry and consumers. The UN climate change conference in Cancun, Mexico, produced a more encouraging outcome than expected. But with so many countries involved, the process of addressing climate change through international agreements is inevitably slow.

We are working on what we can do today to contribute to a sustainable energy future: producing more natural gas for power generation; focusing on sustainable biofuels; helping to develop carbon capture and storage technology; and making our own operations more energy efficient. Our advanced fuels and lubricants are helping our customers save energy.

At Shell we believe that in making our contribution, there is no time to waste.

A handwritten signature in black ink, appearing to read 'P. Voser'.

**Peter Voser**  
Chief Executive Officer

## OUR APPROACH TO SUSTAINABLE DEVELOPMENT

**Our aim is to help meet the energy needs of society in ways that are economically, environmentally and socially responsible.**

Sustainable development for Shell means considering both short- and long-term interests, and integrating economic, environmental and social considerations into our decision making. This helps govern the way we develop new projects and run our facilities, how we manage our supply chains, and how we share benefits where we operate. It also helps us to make better products for our customers.

Building strong relationships with communities, customers, governments and non-governmental organisations (NGOs) – all of whom have a role to play in building a sustainable energy system – is fundamental to our approach.

Before we begin substantial work on major projects or existing facilities we assess regulatory, environmental and social impacts alongside commercial and technical considerations. This includes

conducting environmental, social and health impact assessments to help understand and manage risks and opportunities. We also consider the potential cost of a project's CO<sub>2</sub> emissions in all major investment decisions, using a price of \$40 per tonne of CO<sub>2</sub>.

All Shell companies and Shell-operated joint ventures are required to comply with our social and environmental requirements. They are set out in the Health, Safety, Security, Environment and Social Performance (HSSE & SP) Control Framework.

Throughout a project and during its operations, we assess lessons learned and share them systematically among HSSE & SP specialists and business leaders. We incorporate these experiences in other projects and in a comprehensive training programme in sustainable development for those who manage our projects and facilities. This training draws on best practice examples and lessons learned from outside Shell.

↓ *Shell employees and partner company staff at the Ormen Lange gas plant, Norway.*



# OPERATING RESPONSIBLY

## SAFETY

**Safety is our top priority. In 2010, we continued to make progress with our best safety record to date.**

Events in the Gulf of Mexico in 2010 served as a stark reminder of why we invest so much time and effort to plan and execute our operations responsibly. Our goal is to have zero fatalities and no incidents that harm our employees, contractors or neighbours, or put our facilities at risk. We continued to make progress towards that aim in 2010 with our best safety performance to date. This included our lowest ever rate of injuries (see graph, page 15).

We manage safety across our business through a combination of rigorous systems and culture. This requires three behaviours from everyone working for us: complying with the rules; intervening in unsafe situations; and respecting people and the environment.

We are reinforcing a culture where safety is a core value, and each person understands their role in making Shell a safer place to work. We hold an annual global Safety Day, and continue to enforce our mandatory 12 Life-Saving Rules with our employees and contractors to prevent serious injuries and fatalities.

### DEEP-WATER SAFETY

Before work begins on drilling a well, we undertake a detailed and lengthy planning process to be sure that the right equipment and the most robust procedures are in place. Our “safety case” approach requires us and our drilling contractors to clarify accountabilities and to thoroughly assess, document and decide on ways to mitigate risks before drilling begins. We have strict standards for designing and drilling deep-water wells. Our wells have at least two independent physical barriers to minimise the risk of a “blowout”, which could cause an explosion or spill. All our installations have detailed plans to respond in an effective and timely manner in the unlikely event that a spill occurs. We conduct emergency response exercises throughout the year to ensure these plans remain effective.

↓ *Perdido, the world's deepest offshore oil drilling and production platform of its type, Gulf of Mexico.*



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# ENVIRONMENT

## **We are sharpening our focus on environmental management in our projects and operations.**

Considering the impact on water, air and land early in projects will become even more important as the search for oil and gas takes us to more environmentally sensitive locations. So will improving the way we run our day-to-day operations to use less energy and fresh water, and prevent spills.

We are working to better manage our environmental impact, drawing on our experience of improving Shell's safety performance through safer behaviours and enforcing rules.

We are focusing on key areas such as CO<sub>2</sub>, flaring, spills, water, and environmentally sensitive areas. For CO<sub>2</sub>, this includes investing in programmes to make our refineries and chemical plants more energy efficient, and developing carbon capture and storage technology. We continue working to reduce continuous gas flaring in Nigeria.

In new projects, we consider sensitive areas early, developing biodiversity action plans and collaborating with experts to protect rich ecosystems. For example, Shell has biodiversity action plans in place at nine major installations and pipelines in areas of particularly high biodiversity value, such as in Australia and Gabon.

We are also preparing for longer-term environmental challenges, such as potential local water shortages (see box).

We work in partnership with leading environmental organisations to support conservation, and to help improve standards and practices in environmental management in the energy sector. In 2010, we worked on more than 30 projects with the International Union for Conservation of Nature (IUCN), Wetlands International, The Nature Conservancy and Earthwatch. These included working to improve the sustainability of biofuels, helping to conserve wetlands in the Gulf of Mexico, and a multi-industry initiative to produce a plan for responsible development of the Arctic.

## **MANAGING WATER USE**

By 2025, two out of three people may live in areas that suffer shortages of water, according to the UN. The energy industry is becoming one of the larger industrial consumers of fresh water globally as it seeks to meet energy demand with resources that are more water intensive to develop, such as tight gas, oil sands and biofuels. For operations in water-constrained areas, we prepare a water management plan that identifies ways to recycle water, use less fresh water and to closely monitor its use. Shell uses advanced technologies and works in partnerships to better manage our use of fresh water. At both the Schoonebeek oil field (Shell interest 30%) in the Netherlands and the SAPREF Refinery (Shell interest 37.5%) in South Africa there are agreements with local water authorities that allow the reuse of household waste water for industrial purposes. We are building water treatment plants with the regional water authority near our Geelong Refinery in Victoria, Australia, to recycle our process water; and with the city of Dawson Creek in British Columbia, Canada, to supply our tight gas operations at Groundbirch.

## COMMUNITIES

**Wherever we operate we are part of a community. We work with communities to help develop local economies and improve how we operate.**

Being part of a community means sharing a range of benefits with those around us. They include local jobs and training, contracts for goods and services, and the investments we make in community programmes. In 2010, our total spend on contracting and procurement worldwide was over \$60 billion, including \$13 billion on goods and services from companies in countries with lower incomes.

Our business success depends more than ever on our neighbours' trust. Listening to and engaging with our neighbours helps us identify and respond to concerns. We hold open days and community engagement sessions when we plan and develop new projects, and to improve how we run our operations. At most of our refineries and chemical plants, we work through local advisory panels to discuss our activities and any issues of concern with the community. We also launched mandatory global requirements in 2010 for managing how we perform in our relationship with communities.

### NIGERIA

Each year Shell Petroleum Development Company of Nigeria Ltd (SPDC) and its partners contribute hundreds of millions of dollars to development in Nigeria. Some of this is required by law, but SPDC also invests directly in health care, education and other social initiatives. In the past, communities did not always have the opportunity to plan and execute such projects. In 2006, SPDC introduced a different approach, known as a global memorandum of understanding (GMOU), to put communities at the centre of planning and implementation. Communities identify their own needs, decide how to spend the funding provided by SPDC and its joint-venture partners, and directly implement projects. By the end of 2010, SPDC had GMOUs in 244 communities. In Port Harcourt the GMOU model was used to launch the Niger Delta's first community health insurance scheme. More than 8,000 people had signed up by the end of 2010. Many have now received previously unaffordable medical treatment including vaccinations, maternal care and operations.

↓ *Monitoring blood pressure under the new health insurance scheme in Nigeria.*



# BUILDING A SUSTAINABLE ENERGY SYSTEM



↑ *Natural gas transported from the Oman liquefied natural gas facility.*

## **Shell takes a range of responsible approaches to securing diverse energy for our customers.**

Energy powers economic growth, raising living standards and lifting millions from poverty. Demand for energy is increasing, but so are the global environmental stresses linked to meeting this demand: rising CO<sub>2</sub> emissions and pressure on natural resources, such as water.

Increasing global population and rapid economic growth in the developing world are driving the surge in energy demand. China has now overtaken the USA as the world's largest consumer of energy. By 2050 there are expected to be around 9 billion people, over 2 billion more than today. Energy demand by then could have doubled, according to the International Energy Agency (IEA).

A transition to a sustainable energy system is beginning, but it will take decades. Fossil fuels provide around 80% of the world's

energy today and they are expected to remain the cornerstone of the global energy system for many years to come. Even with continued long-term government support, renewables and nuclear power may account for around a third of the global energy mix by mid-century. New technologies can take 30 years to achieve just 1% of the global market – wind power, for instance, is expected to reach this point in the next few years.

Shell continues to secure diverse energy for its customers. We are producing more cleaner-burning natural gas and using advanced technologies to develop new resources. We also work to make transport more sustainable with low-carbon biofuels and more efficient fuels and lubricants. We work with partners, communities and governments to deliver this energy more sustainably.

## LIMITING CO<sub>2</sub> EMISSIONS

**Shell believes the best way to secure a more sustainable energy future is to take action today.**

The need to tackle climate change remains urgent. At the UN climate change conference in Cancun, Mexico, more than 190 nations agreed that to avoid the worst effects of climate change, the world must limit the rise in global temperature by mid-century to 2°C. Greater energy efficiency will help, but the challenge is to find ways to produce more energy with significantly lower CO<sub>2</sub> emissions. All forms of energy will be needed to meet demand, including cleaner fossil fuels and renewables.

Shell is producing more cleaner-burning natural gas for use in power generation; focusing on sustainable biofuels to cut CO<sub>2</sub> emissions from road transport fuels; developing technology to capture and store CO<sub>2</sub> emissions; and working to improve the energy efficiency of our own operations. The advanced fuels and lubricants we develop help our customers use less energy.

The use of more natural gas for power is a critical pillar of a new sustainable energy system. A third of the world's CO<sub>2</sub> emissions come from power generation. Given that the

power sector is such a vital part of the energy system that helps economies grow, we believe it must be the top priority for cutting global CO<sub>2</sub> emissions. Generating power from natural gas produces 50-70% less CO<sub>2</sub> than a coal-fired plant. Combining natural gas with carbon capture and storage could reduce CO<sub>2</sub> emissions by 90% compared to coal. Replacing ageing coal-fired power stations with new gas-fired plants could therefore significantly reduce CO<sub>2</sub> emissions from the power sector. Natural gas is also abundant, with 250 years of supplies at current production rates. Natural gas will account for over half our total production in 2012.

Many governments are already developing national, regional and sector-based CO<sub>2</sub> regulations. These practical approaches could eventually link to form a global market that would provide the most effective way of tackling climate change. Such a market would encourage the adoption of lower-CO<sub>2</sub> approaches that are faster to implement and less costly – such as natural gas instead of coal for power generation. This would discourage governments from favouring technologies that need support from subsidies. It would also create an incentive to develop commercially viable technologies to reduce CO<sub>2</sub> emissions.

↓ *Researcher at the Shell Technology Centre Amsterdam, the Netherlands.*



# PRODUCING CLEANER ENERGY



↑ Working at Groundbirch, Canada.

## **Natural gas, the cleanest-burning fossil fuel, is an essential part of a sustainable energy system.**

Natural gas for power generation significantly reduces CO<sub>2</sub> emissions compared to coal and produces fewer pollutants. Most of Shell's natural gas production comes from conventional fields. But our production of gas trapped in dense rock – tight gas – is rising rapidly. We are active in six major tight gas projects in the USA and Canada, and are currently producing enough tight gas to meet the needs of nearly 5 million US homes. We also produce tight gas in China and are developing new projects there. We are in the early stages of assessing potential tight gas resources in Australia, Europe and southern Africa.

Developing tight gas poses technical and environmental challenges, but the method used has been refined over more than 60 years and applied safely around the world. A process known as hydraulic fracturing forces the gas out of the rock using a fluid consisting of more than 99% water and sand with a small amount of chemical additives. This mixture is pumped into deep formations

under high pressure, fracturing the rock and freeing the gas. The additives used in the fluid are in low concentrations. Shell supports moves in the USA and elsewhere to require drilling contractors to disclose these additives to oil and gas regulatory authorities.

Studies by the US Environmental Protection Agency (EPA) and the Ground Water Protection Council have shown that hydraulic fracturing is safe. We have decades of experience with this process and we continue to follow strict measures to protect drinking water supplies. The tight gas we produce typically lies over a thousand metres below fresh-water aquifers. We prevent fracturing fluid from coming into contact with ground water by lining the wells with multiple steel and concrete barriers. We also use advanced underground sensors to monitor the fracturing process.

Fracturing uses more water than conventional production processes. But we recover some of this water for reuse – for example, typically 20-40% at Groundbirch, one of our tight gas projects in Canada. Increasingly it comes from sources other than local water supplies, such as treated waste water from nearby communities.

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## LIQUEFIED NATURAL GAS

**Shell helped pioneer the supply of liquefied natural gas (LNG) more than 40 years ago. Today we are one of the world's largest LNG suppliers.**

Some of the world's largest resources of natural gas lie far from customers who need cleaner energy to power their homes and businesses. By cooling the gas to  $-162^{\circ}\text{C}$  we turn it into liquid and shrink its volume by 600 times, enabling us to ship it around the world. At its destination, the LNG is turned back into gas for piping to customers.

We have found innovative ways to reduce the energy needed for LNG operations in regions with high temperatures. Our joint-venture LNG facilities in Oman, for example, use seawater for cooling, reducing the power needed to refrigerate the gas. These plants have lower  $\text{CO}_2$  emissions than other LNG plants in hot climates.

We aim to share benefits with the communities close to our LNG plants, and work to protect the local environment. In Nigeria, for example, Shell companies have helped set up a local utility company that supplies affordable and reliable electricity to the community near the Bonny Island LNG plant operated by Nigeria LNG (NLNG, Shell interest 26%). In Russia's far east, we shut down seismic survey operations off Sakhalin Island several times in 2010 when whales were nearby.

Many offshore gas fields are too small or too remote to be accessed economically. Shell is developing floating LNG (FLNG) capability to reach these resources. In 2010, we received environmental approval for our proposed Prelude FLNG project off the north-west coast of Australia. If we proceed, the Prelude development would be one of the first deployments of FLNG in the world.

## CARBON CAPTURE AND STORAGE (CCS)

A wide-scale capability to capture carbon dioxide from industrial plants and store it deep underground will be crucial to reducing  $\text{CO}_2$  emissions. For CCS to be widely adopted, the support of communities will be essential. Government support is also vital as demonstration projects to develop CCS technologies are costly and generate no revenue for industry.

Technologies needed for CCS are proven, but work is under way to advance them further. Shell is involved in a number of CCS research and demonstration projects. For example, with partners and government support we are helping to develop an advanced test centre at Mongstad, Norway.

We are also involved in plans for full-scale CCS projects. The Gorgon LNG project (Shell interest 25%) will include the world's largest CCS project. It will capture nearly 3.8 million tonnes a year of  $\text{CO}_2$  produced with the natural gas, and store it more than 2 km underground. The CCS project has received A\$60 million in financial support from the Australian government. In Alberta, Canada, the federal and provincial governments have pledged C\$865 million to the Quest project to capture and store  $\text{CO}_2$  from our oil sands operations (see page 11).

# DELIVERING ENERGY RESPONSIBLY



↑ Giant truck used to mine oil sands, Canada.

↓ Pipeline inspection in the Russian Arctic.



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## OIL SANDS

Canada's oil sands are one of the world's largest potential sources of crude oil. If developed responsibly they can make an increasing contribution to meeting the world's energy needs. But developing and processing oil sands is energy and water intensive. At our oil sands operations in Alberta, Canada, we are tackling these challenges. For example, we are working to develop a large-scale carbon capture and storage (CSS) project. In late 2010 we filed a regulatory application for the proposed Quest project, which could capture and store over 1 million tonnes of CO<sub>2</sub> a year from our Scotford Upgrader. We are involved in work with aboriginal groups, NGOs, government and other oil sands operators to reduce the combined impact of the industry on the Athabasca River. To better manage tailings – a mixture of water, sand, clay and residual hydrocarbons – we agreed in 2010 to share our tailings research and technology with a number of other companies, and to collaborate on future research.

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## ARCTIC

The Arctic's environment is already undergoing change due to global warming. It is home to indigenous peoples who depend on the land and sea for their livelihoods. Developing the region's rich resources will mean meeting and balancing economic, environmental and social challenges. More than 50 years of safely delivering projects in Alaska, Canada, Norway and Russia has given us valuable experience in how to work responsibly in Arctic and subarctic conditions. We work with indigenous peoples, governments, NGOs, industry bodies, universities and environmental organisations to share knowledge and improve our approach to working in the Arctic. For example, in 2010, Shell and Alaska's North Slope Borough entered into a long-term agreement to collaborate on further research into significant environmental challenges connected with developing energy resources in the region. This programme aims to balance traditional ecological knowledge with science to answer key questions and concerns of local residents, which are centred mainly on subsistence.

# MAKING TRANSPORT MORE SUSTAINABLE

## FUEL EFFICIENCY

**Shell is combining innovation with its long-established technical expertise in fuels to help develop more energy-efficient road transport.**

Shell FuelSave – our most efficient fuel ever – is now available in 10 countries across Europe and Asia. In 2010 we started selling it in Denmark, Germany, Norway, Thailand and the UK. Shell FuelSave can save up to one litre of fuel in a 50-litre tank at no extra cost to the driver using a formulation that reduces energy loss in the engine. We estimate that by the end of 2010, almost two years since its launch, motorists using Shell FuelSave had saved over 350 million litres of fuel. Shell also offers online tips to help drivers improve their fuel economy through better driving.

Shell FuelSave Partner is a new fuel management system that combines monitoring fuel consumption with information on vehicle and driver performance. Fuel accounts for up to 30% of operating costs in the commercial road transport sector. Shell FuelSave Partner was launched in 2010 to help truck owners cut costs by using less fuel, reducing CO<sub>2</sub> emissions. It produces reports that truck operators can use to improve their fleet's fuel efficiency by up to 10%.

We continue to develop and offer advanced lubricants to increase efficiency. For example, our synthetic lubricant, Shell Helix Ultra, can achieve up to 2.2% greater fuel efficiency by reducing friction more effectively in the engine.

## ENERGY EFFICIENCY

It takes energy to make our transport fuels, lubricants and chemical products. Saving energy in our operations helps to reduce our CO<sub>2</sub> emissions. It also reduces costs. Energy typically accounts for around half of all costs at refineries and chemical plants. We are working to improve our energy efficiency to reduce CO<sub>2</sub> emissions and make products that are more cost competitive. In 2010, our refineries used energy slightly more efficiently than in 2009, while our chemical plants improved significantly (see graphs, page 15).

Customer demand affects energy efficiency at our plants as they do not run as efficiently when operating below capacity. We continue to make underlying progress in our energy efficiency. Our global CO<sub>2</sub> and energy management (CEM) programme drives this improvement. It includes focused capital investments and brings common tools and technologies across our operations to optimise energy use. For example, the CEM information system monitors energy efficiency by identifying potential energy savings within production units so operators can make adjustments to the plant and its equipment. We continue to implement this programme at our plants globally.

## BIOFUELS



↑ Trucks transporting sugar cane to a Cosan mill, Brazil.

**We believe the most practical, commercially viable way to reduce CO<sub>2</sub> from transport fuels over the next 20 years will be lower-carbon biofuels.**

In 2010, Shell sold 9.6 billion litres of biofuels in petrol or diesel blends. We are one of the world's largest distributors. We are now investing in the production of the lowest CO<sub>2</sub>, most sustainable and cost-competitive of today's biofuels – Brazilian sugar-cane ethanol. This can reduce CO<sub>2</sub> emissions by around 70% compared to petrol. In 2010, we agreed to form the \$12 billion Raízen joint venture with Cosan, Brazil's largest producer of ethanol. We also continue to invest in developing advanced biofuels for the future.

We support international certification schemes that require biofuels to come from sustainable sources. We have also been introducing our own sustainability clauses into new and renewed supplier contracts since 2007. These clauses require suppliers to respect human rights in the production of their biomass and biofuels. They also require suppliers not to cultivate, produce or manufacture biofuels in areas rich in biodiversity. Suppliers must be able to

trace supply chains, and they must belong to relevant international bodies promoting sustainable biomass production. In 2010, 83% of the volume of biofuels we purchased was from suppliers signed up to these clauses.

We also work with industry, governments and voluntary organisations towards the development of global sustainability standards for biofuels. We are active in a number of roundtable organisations that have developed sustainability certification schemes. For example, we belong to Bonsucro, formerly the Better Sugar Cane Initiative, which works to reduce environmental and social impacts of sugar-cane production. Bonsucro has developed industry standards for the certification of biofuels from sugar cane.

As part of our agreement with Cosan, we have drawn up a series of robust sustainability standards and procedures that must be followed. They include sound land, water management and labour practices. In the coming years, Raízen aims to have its mills and all ethanol produced from its own sugar cane certified under the Bonsucro scheme. It also plans to have certified all ethanol produced from suppliers' sugar cane.

# IMPROVING OUR PRODUCTS



↑ Testing new foam formulations, Shell Technology Centre Bangalore, India.

**Offering products that are safer or reduce the resources used in packaging are two of the ways we help our customers and reduce environmental impacts.**

## SAFER PRODUCTS

Demand for consumer goods that include foams, such as mattresses and seating, is growing significantly in developing countries. Shell makes polyols – key ingredients in foam manufacture – at our chemical plants in Singapore and the Netherlands. We developed a new polyol that can make higher quality foam more reliably and safely. The new Caradol™ grade came onto the market in 2010, with first sales in India.

## MAKING USE OF SULPHUR

Shell is finding innovative uses for sulphur – a naturally occurring element used in many industrial processes, and a by-product of some oil and gas production. For example, trials have shown that Shell Thiogro™, a sulphur-enhanced fertiliser technology, can increase crop yields in some types of soils. We have licensed Shell Thiogro™ in Australia, India and the USA. Another sulphur-based product, Shell Thiopave™, uses less energy in road making as the asphalt can be mixed at lower temperatures. We have trialled Shell Thiopave™ on roads in China, Europe, the Middle East and the USA.

## LESS PACKAGING

The Ecobox™ is a new approach to packaging motor oil developed by Shell. Instead of using plastic bottles, the Ecobox™ houses oil in a flexible plastic liner encased in cardboard. It simplifies transport and storage, leaves less residual oil behind in the container, minimises spills and reduces waste. The Ecobox™ plastic liner generates 89% less plastic landfill waste than the alternative 24 quart (22.7 litre) plastic bottles, while the carton is fully recyclable. By the end of 2010, the Ecobox™ was being used in more than 3,600 vehicle service centres in the USA and Canada. Walmart named Shell Lubricants supplier of the year for sustainability in 2010, citing Ecobox™ as a key factor.

## BETTER DRILLING FLUIDS

Shell continues to develop its range of NEOFLO™ drilling fluids to support responsible offshore drilling. Compared to those based on traditional oils, NEOFLO™ drilling fluids are virtually free of aromatic hydrocarbons and are more biodegradable, minimising possible harm to marine life. We are producing NEOFLO™ drilling fluids at our Geismar plant in Louisiana to meet rising demand from customers running drilling operations in Australia, Brazil, Brunei, the USA and West Africa.

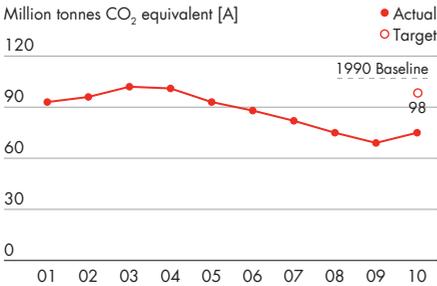
# OUR PERFORMANCE

For Shell, 2010 was a year of good economic performance and increased oil and gas production. We delivered major projects that will help sustain our future growth. Our environmental performance saw improvements in energy efficiency and in reducing the number of operational spills. Greenhouse

gas emissions rose as production increased across the company. We achieved our best safety record to date. Details of our social and environmental performance is contained in the Shell Sustainability Report 2010.

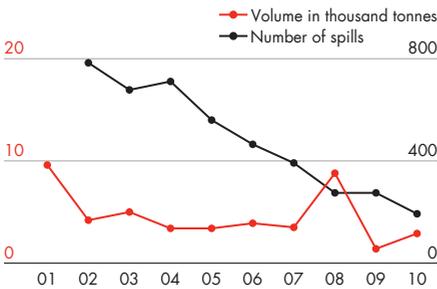
[www.shell.com/sustainabilityreport](http://www.shell.com/sustainabilityreport)

## DIRECT GREENHOUSE GAS EMISSIONS



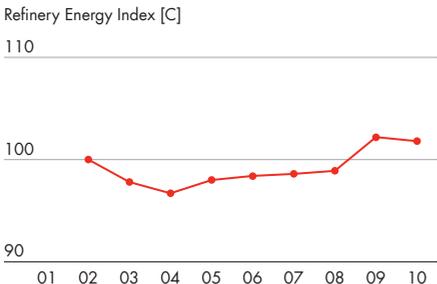
[A] Target and baseline adjusted to reflect portfolio changes

## SPILLS – OPERATIONAL [B]



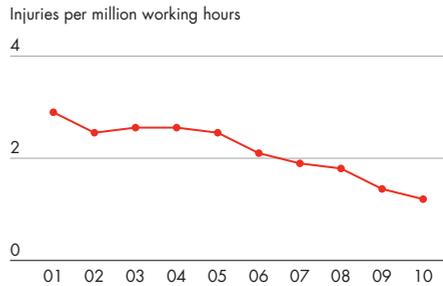
[B] Over 100 kilograms

## ENERGY INTENSITY – REFINERIES

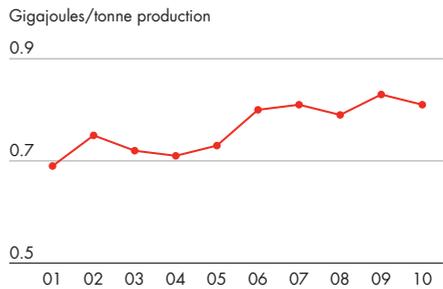


[C] Indexed to 2002; based on 2006 Solomon EITM methodology

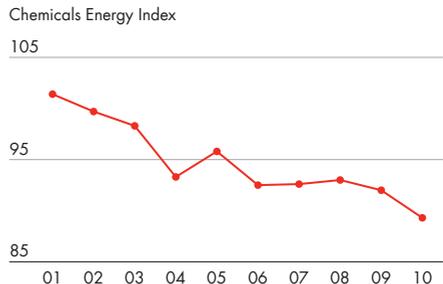
## TOTAL RECORDABLE CASE FREQUENCY



## ENERGY INTENSITY – UPSTREAM (EXCLUDING OIL SANDS)



## ENERGY INTENSITY – CHEMICAL PLANTS



PRODUCED **2%**  
OF THE WORLD'S OIL...

...AND **3%**  
OF THE WORLD'S GAS

**3.3** MILLION  
BARRELS OF OIL EQUIVALENT  
PRODUCED A DAY...

...OVER **48%**  
OF WHICH WAS NATURAL GAS

SOLD **7.6%**  
OF THE WORLD'S LNG

SOLD FUEL  
CONTAINING **9.6**  
BILLION LITRES OF BIOFUEL

**\$20.5** BILLION  
INCOME

**\$23.7** BILLION  
NET CAPITAL INVESTMENT

**\$13** BILLION SPENT  
WITH LOWER-INCOME  
COUNTRIES

**\$1.0** BILLION  
SPENT ON R&D

EMPLOYED **93,000**  
PEOPLE

OPERATED IN **90+**  
COUNTRIES

This is a shortened version of the Shell Sustainability Report 2010. In case of any inconsistencies, the Shell Sustainability Report 2010 prevails. Additionally, prior to making investment decisions, please see Royal Dutch Shell plc's 2010 Annual Report and Form 20-F for the year ended December 31, 2010 for risks associated with an investment in Royal Dutch Shell.



AVAILABLE FROM  
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