



# **SUSTAINABILITY SUMMARY**

Royal Dutch Shell plc  
Sustainability Summary 2014

# INTRODUCTION FROM THE CEO



*“As we work towards a lower-carbon future, it will be necessary to rely on a variety of energy sources.”*

Welcome to Shell’s Sustainability Summary for 2014. It has been a year of uncertainty, with a falling oil price towards the end of 2014 and geopolitical instability in regions such as the Middle East. We continue to take a long-term view of our business and remain in a strong position commercially.

The international dialogue about how to address climate change gained pace during the year, particularly with the joint announcement by the USA and China to set emissions targets. Climate change remains one of the most pressing challenges facing the world.

## THE ENERGY TRANSITION

Today, an energy transition is taking place: a slow but steady shift from a predominantly carbon-based system towards one of net-zero carbon emissions. At the same time, there are more than 1.2 billion people globally who still lack access to modern energy. For these people, the availability of affordable energy is a basic need. Energy can help people move out of poverty, support businesses and grow local economies. This poses a challenge for policymakers and others, including the oil and gas sector: how to provide people with affordable energy while reducing carbon emissions.

The world needs to meet the energy demands of a global population projected to reach nine billion by 2050. This will require continued growth in renewables and improvements in energy efficiency. As we work towards a lower-carbon future it will also be necessary to rely on a variety of energy

sources. This includes fossil fuels with technologies that reduce emissions such as carbon capture and storage (CCS).

There is no simple answer or single approach to this energy transition. The world needs tailored policies appropriate for countries at varying stages of development. Advanced economies will need to review their energy mix to ensure they make the best use of all options, including renewables and lower-carbon energy solutions, whereas emerging economies may need to make use of their own resources, if available.

To meet these differing needs and move towards a lower-carbon future, we need policy frameworks that support more energy-efficient systems; lower-carbon options such as gas; CCS to reduce carbon dioxide emissions; and renewables – areas in which Shell is already working. Innovation will play a key role in making this happen. We are developing advanced biofuels and looking closely at future technologies such as hydrogen-based fuels. Governments can also support progress by introducing effective carbon trading systems and carbon pricing mechanisms to encourage investment in lower-carbon technologies.

## OPERATING RESPONSIBLY

At Shell, we have long been known for our strong focus on safety with the goal of no harm and no leaks in our operations. Respect for people, their safety, their communities and the environment remain top priorities.

Sustainability at Shell includes our being a respected and valued member of society, which is essential to the longevity of our business. It informs our business decisions and is embedded in our company culture and has long been part of our Business Principles and our day-to-day operations.

At every stage of our operations we seek to reduce our impact on the environment and listen to the communities with which we work. This helps us to understand the indirect effects of our operations, both positive and negative, and to contribute where possible to the communities' needs. The Arctic is a case in point, we will only go ahead with exploration when we are fully prepared and ready to do this responsibly.

Within Shell, we need to do more to reduce our emissions and energy use within our operations. We are taking steps to reduce our flaring and fugitive methane emissions. We have signed up to the World Bank's initiative to end continuous flaring by 2030 and are collaborating with partners in the oil and gas industry to design and implement common standards on methane emissions. This work is critical if cleaner energy from oil and gas is to be part of a lower-carbon future.

## MORE COLLABORATION

As a global energy company, we have a significant role to play in the energy transition. Shell's ability to innovate combined with our experience of working in partnership with others means that we can be essential participants in the emerging energy system. We are already working with governments in countries that include China and the Netherlands, to help design policy frameworks for developing their energy systems. This approach could be replicated in other countries. All must work together

to create effective policies and solutions that provide communities with the energy they need.

Our Sustainability Report details our activities during 2014. The report builds on our commitment to sustainability and transparency over the years – we were a founding member of the United Nations Global Compact and continue to support its principles on human rights, labour, the environment and tackling corruption.

I invite your comments on the report. Please send them to [sustainabilityreport@shell.com](mailto:sustainabilityreport@shell.com).



**Ben van Beurden**  
Chief Executive Officer

# OUR APPROACH

## WHY ENERGY MATTERS

Energy is essential to growth in today's world. It serves the needs of a growing population and is a tool to help people out of poverty.

Today's global energy system is under pressure from the need to tackle climate change. There is an urgent need to reduce global carbon dioxide (CO<sub>2</sub>) emissions. As the world reassesses the way in which it produces and consumes energy, the challenge is how to provide more energy with less CO<sub>2</sub> and to move from a predominantly carbon-based system towards one of net-zero carbon emissions.

### THE ROLE OF RENEWABLES

Renewable energy – including wind, solar, biomass and hydropower – will play a key role in the transition towards a lower-carbon future. It will eventually become the largest component of the global energy system.

### THE ROLE OF HYDROCARBONS

Despite this strong rise in renewables, a mix of energy sources will be needed to meet growing global demand. It is possible to have an energy mix that includes oil and gas, along with biofuels and solar and wind power, as part of the transition to a lower-carbon future. The key is to reduce the associated emissions with carbon capture and storage (CCS), energy efficiency and a shift from coal to gas.

### WHAT SHELL IS DOING

Gas is the cleanest burning fossil fuel and can be used as a reliable back-up energy source for solar and wind. Shell currently supplies gas to more countries in the world than any other energy company.

Technology innovations, such as CCS, can also play a critical role in combating climate change. CCS is an important technology as it has the potential to help reduce cumulative CO<sub>2</sub> emissions from power generation. Shell is one of the largest producers of biofuels in the world through our joint venture Raízen in Brazil. We are also developing advanced biofuels that convert plant waste into low-carbon fuels.

### COLLABORATING FOR A LOWER-CARBON FUTURE

We are also collaborating with governments and civil society to develop and implement cleaner energy solutions. Shell encourages an informed debate towards making real progress to reduce CO<sub>2</sub> emissions.

Urban populations will increase most in China, India and Nigeria. Below is Chongqing, China.



## SUSTAINABILITY AND OUR BUSINESS STRATEGY

Our role in sustainability is to help meet current energy needs in a responsible way. We do this by operating in line with international standards, our own stringent frameworks and best practice.

When we invest in energy projects we seek to balance the short- and long-term interests of our business – the energy business requires long-term investments and there are many countries where we have operated for decades. We seek to balance a broad range of risks in our portfolio choices to consider the economic, social and environmental risks as well as political and technical.

### INTEGRATING SUSTAINABILITY

Our approach to sustainability works across our activities on three levels:

#### Running a safe, efficient, responsible and profitable business

This is the foundation of our approach. It enables us to deliver sources of energy to our customers and to earn the trust of people who are affected by our business. We have standards, processes and tools to manage safety, reduce our environmental impact and involve communities. Respecting and safeguarding people – including our employees, contractors and neighbours – is fundamental to how we conduct business.

#### Sharing wider benefits where we operate

We aim to bring benefits to communities and local economies by creating jobs, procuring local services and goods, supporting business development, and paying taxes and royalties. Our social investment programmes focus on road safety, access to energy and skills development in the communities where we operate. We engage with communities and work to address any concerns they may have about our operations so that we can reduce any negative impacts.

#### Helping to shape a more sustainable energy future

At Shell, we aim to be essential participants in the energy transition. This includes promoting thought leadership and collaborations in areas such as our work on cities and resilience. We also advocate on carbon pricing and invest in lower-carbon portfolio choices that include carbon capture and storage, advanced biofuels and alternative technologies, such as hydrogen-based fuels. We also contribute to public debates and discussions on climate and energy policy, including advocating for higher standards across areas such as safety and environmental management.

### GOVERNANCE AND STANDARDS

Our governance procedures are applied to all areas of decision making across Shell. This involves the Board of Royal Dutch Shell plc, four Board Committees, the Executive Committee, and the teams and individuals who work in our operations. We take rigorous care to ensure that decisions are cascaded within the business.

The Corporate & Social Responsibility Committee is one of the four Board Committees. Their views and findings about our sustainability practices are integrated into Shell's business to strengthen our procedures and operations within countries.

In 2014, the Committee visited Shell's operations in Canada, including the oil sands in Alberta, the Groundbirch tight gas and oil field, and the site of the proposed liquefied natural gas development at Kitimat.

## HOW WE OPERATE SAFETY

Safety is critical to the responsible delivery of energy. We develop and operate our facilities with the aim of preventing any incidents that may harm our employees, contractors or nearby communities, or cause environmental impact.

Our safety goal at Shell is to achieve no harm and no leaks across all of our operations. We refer to this as our Goal Zero ambition. We approach safety across the areas of personal, process and transportation safety. In 2014, we achieved our best ever safety performance record.

To meet our safety goal, it is critical that we maintain a culture where our employees and contractors understand their own role in making Shell a safe place to work. In 2014, we reinforced the importance of the role of leaders to instil a culture of safety across Shell.

Process safety is making sure the right precautions are in place to prevent unplanned releases of hydrocarbons and chemicals. We seek to ensure that our facilities are well designed, inspected, maintained and operated.

Shell has defined global technical safety standards for all projects and facilities. These are based on industry standards as well as best practice. If an incident takes place, we learn from the outcomes and embed any new knowledge into our technical safety standards and practices. We routinely practise and review our emergency response plans for potential incidents in exercises with the local services and regulatory agencies that would be involved if an incident took place.

Shell is always working to improve on road safety with ongoing training, the sharing of best practice and by developing programmes in countries that may lack the adequate laws, enforcement or infrastructure.

## ENVIRONMENT

We carefully consider the potential environmental impact of our activities and how local communities might be affected, both before projects begin and during operations.

We work to manage and minimise environmental impact from our operations. Our approach is to comply with environmental regulation, to continually improve our performance in line with best practice, and to prepare for future risks and opportunities. Detailed assessments of the potential environmental, social and health impacts are carried out when we plan new projects.

### AIR QUALITY

Emissions of nitrogen oxides, sulphur dioxide and volatile organic compounds from the production and processing of fossil fuels can affect air quality. We work to reduce air pollution from our operations.

### SENSITIVE ENVIRONMENTS

Our projects can affect local biodiversity and dependent communities. When we operate in critical habitats – that is, those that are rich in biodiversity and important to the conservation of endangered species – we apply stringent mitigation standards. This includes reviewing how local people may depend on biodiversity and ecosystems for essentials such as fresh water and food for their subsistence.

### WASTE MANAGEMENT

We aim to reduce the amount of waste we generate and reuse or recycle, where possible. The decommissioning of retired platforms and infrastructure is also potentially a major source of waste. For example, at the Brent field Shell has set a 97% recycling target for the topsides of the structures.

### WATER

Our water management approach is based on complying with local and international regulations, on improving our performance and preparing for the future. Across the world, water constraints tend to affect people at the local or regional level. Therefore, the way in which Shell manages our use of fresh water is often tailored to the local situation.

## COMMUNITIES

Community engagement is fundamental to our approach to sustainability. It helps us to find better solutions, build people's trust and is the basis for operating responsibly.

Many of our operations have neighbouring communities. It is critical that we assess the potential impacts of our business activities and engage with communities. We work closely with communities to understand their concerns and decide how to best address them. This can cover issues relating to how our projects may affect their lives, such as increased traffic or water use.

We work to reduce any negative impacts on the people who live near our facilities and to manage those impacts that may be unavoidable. We develop a social performance plan for all our major projects and sites.

### INVESTING IN COMMUNITIES

Social investment is an important part of being a good neighbour in the countries where we operate. Each country develops its own social investment strategy, working within a common global framework and direction.

Our approach to social investment is to understand the local context and then invest in areas that complement Shell's business and the needs of that community. In some cases, we also contribute

to communities through philanthropy. In 2014, we spent around \$160 million on voluntary social investment projects around the world.

Shell's three core themes of social investment are in areas that are relevant to our business and where we can offer business expertise: access to energy as an enabler to social development; improving road safety; and supporting local enterprise and sustainable employment within communities. Shell teams in different countries work in consultation with communities to choose the most relevant themes in which to invest.

For example, our LiveWIRE programme helps entrepreneurs start their own businesses, build skills and turn their ideas into long-term sources of income. The programme is active in 15 countries where we operate.

Energy generated by the football players' movement is used to power the lights in this soccer pitch, supported by Shell LiveWIRE. Rio de Janeiro, Brazil.



## ENERGY AND CLIMATE CHANGE

International climate experts state that greenhouse gas emissions are rising faster than ever. Shell's approach to climate change is based on understanding and addressing this challenge.

At Shell, we advocate for changes in policies that could lead to a reduction in the level of carbon dioxide (CO<sub>2</sub>) in the atmosphere. This is focused on three key areas:

- encouraging countries to switch from coal to gas which could slow the rate of CO<sub>2</sub> accumulation in the atmosphere;
- encouraging policy makers to set effective and meaningful pricing on CO<sub>2</sub> emissions; and
- encouraging governments to provide support over a limited amount of time for all lower-carbon technologies including carbon capture and storage (CCS) and renewables.

Shell is working to reduce emissions from our existing oil and gas projects, refineries and chemical plants. We have emissions management plans in place but we recognise that we need to do more to reduce both our energy use and emissions.

### GAS AS AN ENERGY SOURCE

Shell believes that natural gas is a versatile, abundant and cleaner-burning fuel. Natural gas, the lowest-carbon fossil fuel, accounted for more than half of our energy production in 2014. A natural gas-fired power plant produces around half the CO<sub>2</sub> emissions of a coal-fired plant.

Natural gas can also serve as a back-up system for intermittent renewable energy, such as solar and wind, to maintain a steady flow of electricity, as gas-fired plants can start and stop quickly.

### EFFECTIVE CARBON PRICING

Shell supports the introduction of effective carbon pricing as a way to reduce global CO<sub>2</sub> emissions. An effective carbon price means that all that release CO<sub>2</sub> into the atmosphere, such as heavy industry and the power sector, would pay for every tonne emitted. Carbon pricing systems have the potential to encourage energy efficiency and deploy a range of low-carbon technologies, including renewables.

### COLLABORATION AND ADVOCACY

Shell collaborates with a number of organisations and industry associations to move the energy and climate change discussion forward. We also work with organisations such as the International Emissions Trading Association to support the inclusion of carbon pricing within a future international agreement on climate change. In 2014, we signed the Trillion Tonne Communiqué which makes the case for a strong carbon price.

This continuing work supports our preparations for the 21st session of the Conference of the Parties to the UNFCCC (COP 21) in Paris in late 2015.

### CARBON CAPTURE AND STORAGE

Shell's CCS projects are being developed to test the use of CCS in different settings, with input from local communities and environmental groups.

Quest at the Athabasca Oil Sands Project in Alberta, Canada will be the first use of CCS on an industrial scale in an oil sands operation. When the project starts operating in 2015, Quest is expected to capture more than 1 million tonnes of CO<sub>2</sub> a year.

Preparations continue toward taking our final investment decision for the Peterhead CCS project in the UK.

# OUR ACTIVITIES

## GAS

Natural gas produces significantly lower carbon dioxide (CO<sub>2</sub>) emissions than coal for power generation and is the cleanest-burning fossil fuel. It is an essential energy source in the transition to a lower-carbon energy system.

Natural gas can play a significant role in reducing CO<sub>2</sub> emissions in the coming decades. It produces around half the greenhouse gas emissions of coal throughout its life cycle, from production to its use as fuel in generating electricity.

The CO<sub>2</sub> emissions from gas can be further reduced with carbon capture and storage (CCS). CCS could remove up to 90% of CO<sub>2</sub> emissions from power generation and play a key role in moving towards a lower-carbon future.

Gas makes up more than half of Shell's total production and is used by our customers to generate electricity, power industrial production, heat homes and fuel ships and trucks.

### LIQUEFIED NATURAL GAS

The liquefied natural gas (LNG) process enables natural gas to be easily transported from remote areas to markets around the world. We are one of the world's largest LNG suppliers.

**Our first floating LNG facility is under construction in South Korea.**



### Floating LNG

Floating liquefied natural gas (FLNG) facilities enable liquefied natural gas (LNG) to be produced, liquefied, stored and transported at sea, without the need for pipelines, onshore plants and infrastructure. We are constructing our first FLNG facility, Prelude FLNG (Shell interest 67.5%) which will be located off the coast of Western Australia.

### LNG for transport

LNG can be used as an alternative transport fuel to diesel and heavy fuel oil. LNG powered trucks and ships are quieter and produce lower CO<sub>2</sub> emissions. In 2014, Shell announced it will be the initial customer to use the new LNG transport infrastructure at the Gas Access to Europe (Gate) terminal at the Port of Rotterdam in the Netherlands.

### GAS TO LIQUIDS

Our gas-to-liquids technology makes it possible to use natural gas, rather than crude oil, to make a range of liquid products. These include developing cleaner fuels for cars and aircraft, and materials that are used to make chemicals and lubricants.

### TIGHT GAS AND OIL

Shell currently has a number of projects producing tight gas and oil in the USA, Canada and China as well as exploration projects under way in countries that include Colombia, Argentina, Turkey and South Africa. Shell is a leader in promoting safe and responsible tight gas and oil operations.

We developed and adopted a set of five global principles that govern all our onshore tight gas and oil activities.

**INTERVIEW****ARCTIC: QUESTIONS ANSWERED**

**Ann Pickard**  
Executive Vice President,  
Arctic and Alaska

**So why explore the Arctic at all?**

Exploration of the Arctic is important as future generations may have to depend on it for a significant amount of their energy, especially as the world's population grows from seven billion today to nine billion by 2050. Today, about 10% of the world's oil and 25% of our natural gas come from Arctic regions.

**What do the Arctic nations want?**

The people who live in the Arctic nations own these natural resources and it's their decision alone whether or not they should be developed. These nations have asked Shell and other companies to help explore this vital, long-term source of economic security. So it is important that the focus is on how to explore the Arctic in a way that protects vital ecosystems, respects the way of life of indigenous populations, keeps people safe and encourages high standards of performance for every operator in our industry.

**How can you assure people that Shell won't spill oil on or under the ice?**

We can only drill exploratory wells during the summer months in the open water season starting in July. But of course we cannot assume that a spill can never happen. In Alaska, we have the capability to mount an effective oil spill response: we regularly test our plans and take part in

large-scale joint exercises with other industry partners, government agencies, scientists and oil spill experts. The industry has also developed technologies that can track and remove spilled oil from solid and broken ice if an unlikely worst-case scenario took place.

**Shell's 2012 exploration programme in Alaska did not go well. What has Shell learned?**

We have learned a lot as an organisation. Our actual drilling operations went very well, but that success was overshadowed. There were delays in the delivery of a newly designed and built oil-containment system, marine issues with the Noble Discoverer drilling rig which are now resolved and the grounding of the Kulluk drilling rig, which was decommissioned and recycled in 2014. From these experiences, we have improved our planning, processes and strengthened our Arctic organisation within Shell and among our contractors.

*Read the full Q&A in the Shell Sustainability Report 2014.*

**LETTER****NIGERIA: LETTER FROM MUTIU SUNMONU**

**Mutiu Sunmonu**  
 Chairman of Shell  
 companies in Nigeria  
 (2010 to 2015)

When I joined Shell in the late 1970s, I entered a Nigerian oil and gas industry that was heavily dominated by the international oil companies (IOCs). Looking back after nearly 40 years the most striking development is the emergence of independent Nigerian companies across all levels of the industry. A growing number of these companies are now taking advantage of asset sales from the IOCs, to invest in, develop and in some cases, operate oil and gas fields. This is an exciting trend that bodes well for the long-term sustainability of the oil and gas industry in Nigeria.

This has not happened by accident. The IOCs and Shell, in particular, have invested in building a technically skilled workforce and contractors within Nigeria for many years. I am proud that today the Managing Directors of all the Shell Companies in Nigeria (SCiN) are Nigerians.

I believe that our most important contribution has been the development of our people including engineers, project managers, leaders and entrepreneurs: 95% of Shell Petroleum Development Company of Nigeria and Shell Nigeria Exploration and Production Company employees are Nigerian, while 90% of SCiN contracts were awarded to Nigerian companies in 2014.

Yet challenges remain for SCiN and the wider Nigerian oil and gas industry; an operating environment that remains among the most volatile in the global oil and gas industry. First, crude oil theft has been the defining sustainability challenge during my time as Chairman. Second, SCiN's credibility as a partner of the government and host communities in Nigeria is dependent on us dealing responsibly and transparently with our environmental commitments.

Our performance in preventing, responding to and cleaning up spills has improved in recent years, despite the escalation of crude oil theft and difficulties in securing community permission to access some areas. This has included building skills among people locally to respond to spills and help to remediate sites.

Our industry leading position in Nigeria local content implementation, the step change in working responsibly with host communities and the recognition we have received from local non-governmental organisations for leading the way on spills reporting and transparency are among the achievements of which I am most proud during my time as Chairman.

*Read the full letter in the Shell Sustainability Report 2014.*

## IRAQ

Shell and the energy industry can play an important role in boosting employment, building skills and helping communities.

In Iraq, we are addressing our impacts such as flaring and are seeking to improve the environment surrounding our operations. The Shell-operated Majnoon project (Shell interest 45%) in southern Iraq, produces oil from one of the largest fields in the world.

Much of the gas produced during oil production in Iraq is currently flared. We are working with our partners to capture gas to be used in power generation in Iraq. In the south of Iraq, the Basrah Gas Company (BGC, Shell interest 44%) captures gas from oil fields operated by other companies which would otherwise be flared. BGC is the largest flare reduction project in Iraq's history.

At Majnoon in 2014, the level of associated gas flared has increased in line with production. We have projects planned to reduce this flaring over the next three years. The first commercial production gas project is expected to provide power for the domestic market by the end of 2015.

There are high levels of unemployment in Iraq, particularly among young people. We employ Iraqi people in our workforce and use local contractors and suppliers where possible.

Attending a course at our Majnoon training centre, Iraq.



## OIL SANDS

Canada's oil sands are one of the world's most significant energy resources and an important source of energy for North America.

Development of oil sands can be energy- and water-intensive and must be managed responsibly. We aim to operate our oil sands facilities responsibly and efficiently, and to reduce our environmental impact through improved management of carbon dioxide emissions, water, waste and land. We are governed by a number of regulations including standards for managing waste and reducing mining by-products (tailings).

Tailings are stored in tailings ponds which allow for the sand to settle at the bottom and the water to be recycled. Our tailings are managed carefully to prevent contamination of local water courses, and to minimise risk to wildlife and the surrounding environment.

We also design our projects to reduce our environmental impact. Our Carmon Creek in-situ project, which is currently under construction in Alberta, includes a water reuse system, use of waste gas to power the plant, a land reclamation strategy to reduce land use and steps to protect local species.

We engage with a wide range of people who may be affected by or have concerns about our oil sands facilities, including indigenous communities.

An inspector tests equipment at the Shell Albian Sands in Canada.



## DEEP WATER

Shell pioneered deep-water exploration and production in 1978 at the Cognac field which lies at a depth of 300 metres in the Gulf of Mexico.

Today, technological advances enable us to work in water up to ten times that depth. All our deep-water projects have stringent safety procedures and meet rigorous design, construction and maintenance standards.

We currently operate deep-water projects on five continents. In 2014, we started production at four new projects. As we go into deeper and more challenging operating environments, we continually review our procedures, improve our equipment and develop the skills of our employees. This keeps our employees and contractors safe and helps to prevent spills and leaks from our wells.

Our standards for designing, drilling and operating deep-water wells require that we have at least two barriers to protect against sudden uncontrolled flows of oil or gas out of a well. We are working with the oil and gas industry to further develop effective oil spill emergency response capabilities.

At the start of each deep-water project we assess the potential impacts on the environment and marine life, and take steps to manage and reduce any impacts.

## FUELS AND PRODUCTS

At Shell, we develop and provide transport fuels, lubricants and services to help motorists, shippers and airlines boost the energy efficiency of their vehicles and fleets.

Our transportation fuels and products can help reduce the environmental impact of transportation. This is important as transport increases around the world and regulations to reduce emissions are strengthened.

Shell's natural gas-to-liquids technology makes it possible to use natural gas, rather than crude oil, as the raw material for a range of liquid products, including lubricants and chemicals. In 2014, Shell became the first company to offer natural gas-based fluids and solvents for the chemical industry, globally. These products are biodegradable and less harmful to the environment. They can be used in paints and coatings, inks, water treatment and consumer goods.

We also try to help customers become more energy efficient by changing their driving behaviour. The Shell FuelSave Target One Million campaign aims to help one million motorists save fuel and money. Online games equip users with driving skills and other tips to reduce the cost of motoring and be more fuel efficient. To date, around 420,000 drivers have taken part.

**Bonga North West located off the coast of Nigeria.**



## BIOFUELS

Biofuels are renewable fuels that can be made from a broad range of plant and food wastes. They can be blended with existing fuels such as petrol and diesel.

The production of biofuels needs to be managed in a responsible way to safeguard land use, the environment and local communities. Biofuels can be a valuable part of the energy mix and could be a lower cost way to reduce carbon dioxide (CO<sub>2</sub>) emissions in the transport sector.

There are three main areas for Shell in biofuels: we are one of the world's largest producers of biofuels today through the Raízen joint venture; we have a supply chain of biofuels that we buy and blend into our own fuels; and we are working on developing advanced biofuels.

In 2014, we blended around 9 billion litres of biofuel in our petrol and diesel worldwide – making us one of the largest blenders of biofuels globally. We continue to invest in new ways of producing biofuels from sustainable feedstocks, such as biofuels made from waste product or cellulosic biomass.

In Brazil, Raízen completed the construction of a plant to produce advanced biofuels from sugar cane waste. The technology is provided by logen Energy.

**Biofuel from Raízen is available at this Shell service station in Rio de Janeiro, Brazil.**



## FUTURE TECHNOLOGY

Innovation and the development of new and advanced technologies are at the core of our business.

Shell is one of the largest investors in research and development among international oil and gas companies. In 2014, we spent more than \$1.2 billion on research and development (R&D). Since 2009 around \$1 billion of our R&D investment has been in lower-carbon technologies.

Shell innovates in a number of ways. We have an array of different tools, programmes, partners and funding methods to help us develop new ideas and better technologies, faster and more cost effectively – for example, through our GameChanger, Shell Technology Ventures and Shell TechWorks programmes.

Two of the most important challenges facing the world are the growing demand for energy and the need to reduce CO<sub>2</sub> emissions. We want to be at the forefront of new energy solutions, such as developing selected alternative and renewable energy options as well as making existing types of energy cleaner.

We have dedicated teams within Shell that look at these areas. This includes work in renewable energy production; wind energy; distributed energy and energy storage, hydrogen transport and biofuels.

**GlassPoint's solar technology uses mirrors in a greenhouse to create steam that is used for enhanced oil recovery. Amal, Oman.**



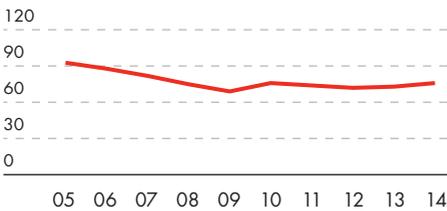
# OUR PERFORMANCE

We continue to work to reduce our impact on the environment, to engage with our neighbours in the communities where we operate and to generate jobs and business opportunities for

local economies. Shell provides data on our safety, economic, environmental and social performance in 2014.

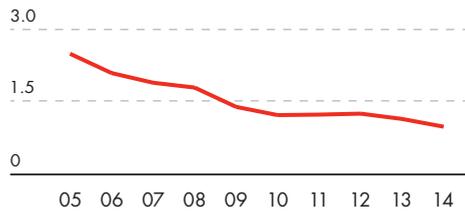
## DIRECT GREENHOUSE GAS EMISSIONS

million tonnes CO<sub>2</sub> equivalent



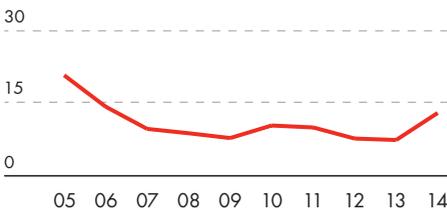
## TOTAL RECORDABLE CASE FREQUENCY (TRCF)

injuries per million working hours



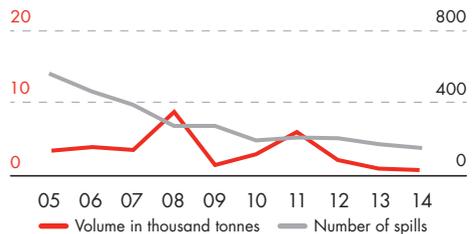
## FLARING – UPSTREAM

million tonnes CO<sub>2</sub> equivalent



## SPILLS – OPERATIONAL [A]

million tonnes CO<sub>2</sub> equivalent



[A] Over 100 kilograms.

### Cautionary note

The companies in which Royal Dutch Shell plc directly and indirectly owns investments are separate entities. In this publication "Shell", "Shell group" and "Royal Dutch Shell" are sometimes used for convenience where references are made to Royal Dutch Shell plc and its subsidiaries in general. Likewise, the words "we", "us" and "our" are also used to refer to subsidiaries in general or to those who work for them. These expressions are also used where no useful purpose is served by identifying the particular company or companies. "Subsidiaries", "Shell subsidiaries" and "Shell companies" as used in this publication refer to companies over which Royal Dutch Shell plc either directly or indirectly has control. Companies over which Shell has joint control are generally referred to "joint ventures" and companies over which Shell has significant influence but neither control nor joint control are referred to as "associates". In this publication, joint ventures and associates may also be referred to as "equity-accounted investments". The term "Shell interest" is used for convenience to indicate the direct and/or indirect ownership interest held by Shell in a venture, partnership or company, after exclusion of all third-party interest.

This publication contains forward-looking statements concerning the financial condition, results of operations and businesses of Royal Dutch Shell. All statements other than statements of historical fact are, or may be deemed to be, forward-looking statements. Forward-looking statements are statements of future expectations that are based on management's current expectations and assumptions and involve known and unknown risks and uncertainties that could cause actual results, performance or events to differ materially from those expressed or implied in these statements. Forward-looking statements include, among other things, statements concerning the potential exposure of Royal Dutch Shell to market risks and statements expressing management's expectations, beliefs, estimates, forecasts, projections and assumptions. These forward-looking statements are identified by their use of terms and phrases such as "anticipate", "believe", "could", "estimate", "expect", "goals", "intend", "may", "objectives", "outlook", "plan", "probably", "project", "risk", "schedule", "seek", "should", "target", "will" and similar terms and phrases. There are a number of factors that could affect the future operations of Royal Dutch Shell and could cause those results to differ materially from those expressed in the forward-looking statements included in this publication, including (without limitation): (a) price fluctuations in crude oil and natural gas; (b) changes in demand for Shell's products; (c) currency fluctuations; (d) drilling and production results; (e) reserves estimates; (f) loss of market share and industry competition; (g) environmental and physical risks; (h) risks associated with the identification of suitable potential acquisition properties and targets, and successful negotiation and completion of such transactions; (i) the risk of doing business in developing countries and countries subject to international sanctions; (j) legislative, fiscal and regulatory developments including regulatory measures addressing climate change; (k) economic and financial market conditions in various countries and regions; (l) political risks, including the risks of expropriation and renegotiation of the terms of contracts with governmental entities, delays or advancements in the approval of projects and delays in the reimbursement for shared costs; and (m) changes in trading conditions. All forward-looking statements contained in this publication are expressly qualified in their entirety by the cautionary statements contained or referred to in this section. Readers should not place undue reliance on forward-looking statements. Additional risk factors that may affect future results are contained in Royal Dutch Shell's 20-F for the year ended December 31, 2014 (available at [www.shell.com/investor](http://www.shell.com/investor) and [www.sec.gov](http://www.sec.gov)). These risk factors also expressly qualify all forward looking statements contained in this publication and should be considered by the reader. Each forward-looking statement speaks only as of the date of this publication, April 10, 2015. Neither Royal Dutch Shell plc nor any of its subsidiaries undertake any obligation to publicly update or revise any forward-looking statement as a result of new information, future events or other information. In light of these risks, results could differ materially from those stated, implied or inferred from the forward-looking statements contained in this publication.

We may have used certain terms, such as resources, in this publication that United States Securities and Exchange Commission (SEC) strictly prohibits us from including in our filings with the SEC. US investors are urged to consider closely the disclosure in our Form 20-F, File No 1-32575, available on the SEC website [www.sec.gov](http://www.sec.gov).

## KEY FACTS

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**2%**

Our share of the world's oil production

**3%**

Our share of the world's gas production

**51.8%**

Share of our production that was natural gas in 2014

**\$14.7** BILLION

Income in 2014

**\$150** MILLION

Fuel consumption savings by our LNG fleet in 2013 and 2014

**\$45** BILLION

Cash flow from operating activities

**\$14.3** BILLION

Paid globally in income taxes

**10%**

Our share of the world's LNG sold in 2014

**\$13.7** BILLION

Spend in lower-income countries

**\$1.2** BILLION

Approximate R&D spend in 2014

**\$342** MILLION

Spend on training and development of employees

**1,074**

Number of assessments of suppliers against Shell Supplier Principles

**25** MILLION

Retail customers a day worldwide

**2014**

Our best ever safety performance



### ABOUT THIS REPORT

This Shell Sustainability Summary is a short overview of the Shell Sustainability Report 2014. Refer to the Shell Sustainability Report 2014 for more details. In case of any inconsistencies, the Shell Sustainability Report 2014 prevails.

Full report available at:  
[www.shell.com/sustainabilityreport](http://www.shell.com/sustainabilityreport)