Shell companies in Nigeria have continued to contribute to economic development in Nigeria with safety and security as our top priorities.

Shell has interests in several companies in Nigeria which are major contributors to the economy. They produce oil and natural gas, distribute gas to industries in the country, produce liquefied natural gas (LNG) for export, generate revenues for the government and provide social investment. Shell companies in Nigeria are also working with federal and state government agencies, communities and civil society groups, such as non-governmental organisations, to try to create a safe operating environment.

In 2017, an agreement between The Shell Petroleum Development Company of Nigeria Ltd (SPDC), the operator of the SPDC Joint Venture (SPDC interest 30%), and its government partner, the Nigerian National Petroleum Corporation, came into effect. This agreement provides an improved structure to finance future oil and gas projects and commercialise the country’s large gas resources. Improved funding will enable the SPDC Joint Venture to explore more opportunities particularly in shallow water offshore and to increase onshore gas supply to the domestic market.

SAFETY OF STAFF AND CONTRACTORS
The safety of staff and contractors in Nigeria remains our top priority. We continue to strengthen our safety culture around Shell companies in Nigeria with our Goal Zero ambition of no harm and no leaks including partly through a programme to connect senior leaders with contractor CEOs to promote best safety working practices. We also continued to run campaigns for employees and contractors in our production operations to help them better understand Shell companies in Nigeria’s work culture, reflect on their leadership and suggest improvements to maintain a safe workplace.

SECURITY IN THE NIGER DELTA
We continued to address safety and environmental challenges related to both operational spills and illegal activities, such as oil theft in parts of the Niger Delta. Although there has been no damage to key oil and gas infrastructure caused by militant activity since November 2016, the security situation remains volatile in this region of the country.

Shell companies in Nigeria continue to work closely with federal and state government agencies, communities and civil society to ensure that operations are carried out in a safe environment.

LOCAL CONTENT INITIATIVES
To enable Nigerian ownership of key equipment such as rigs, helicopters and marine vessels, Shell companies in Nigeria continue to support the development of local people and companies. For example, over the past seven years, Shell Nigeria Exploration and Production Company Limited (SNEPCo) has provided support to improve training and safety standards at Caverton Helicopters, one of the biggest aviation logistics providers in sub-Saharan Africa.
SNEPCo has provided support to improve training and safety standards at Caverton Helicopters.

Current and former Shell employees transfer their technical and project management skills to all sectors of the Nigeria oil and gas industry. Several of the growing indigenous oil and gas producing companies are run by former staff of Shell companies in Nigeria. In September 2017, the annual Global Nigerian Forum in Aberdeen, the UK, sponsored for the fourth year by SNEPCo, provided a platform for Nigerian professionals in the UK to connect with Nigerian companies about participating in offshore exploration activities in their home country.

SOCIAL INVESTMENT PROGRAMMES

Shell companies in Nigeria work with all tiers of government, communities and civil society to fund and implement social investment programmes. Some of these investments are mandated by federal legislation, such as requiring all oil companies in Nigeria to contribute funds from their annual budgets to the Niger Delta Development Commission.

At state government and local community levels, Shell companies in Nigeria focus their social investment activities on areas such as enterprise development, education, health and access to energy. Since launching in the 1950s, the Shell companies in Nigeria scholarship scheme has supported thousands of students to study both in Nigeria and abroad. Several leading figures in Nigeria today were part of the scheme in the 1960s and 1970s.

In 2017, SPDC Joint Venture (JV) and SNEPCo continued to invest in the Cradle-to-Career scholarship programme, which pays for less privileged children from rural communities to attend some of the country’s top secondary schools. Since 2010, 480 students have received Cradle-to-Career scholarships from the SPDC JV and 268 from SNEPCo. Read about one student in Rivers State who received the SPDC JV scholarship.

The SPDC JV also supports community-driven development programmes in the Niger Delta. Since 2006, the programmes have been delivered through the global memorandum of understanding (GMoU). This agreement brings together communities, government representatives, SPDC and nongovernmental organisations and provides secure five-year funding for community projects of their choice. For more details on how one GMoU scholarship benefited students and communities, see www.shell.com.ng.

Dikiburi Diri founded an education training academy in Nigeria after receiving a scholarship to the USA under an SPDC joint venture GMoU initiative.

We work with our partners to explore opportunities to increase access to affordable, reliable and sustainable energy sources for off-grid low-income households, small- to medium-sized businesses and communities in Nigeria, particularly in the Niger Delta.

We have funded All On, an independent Nigerian investment company, which in 2017 approved investments that included solar home system provider Luminos and the country’s leading electricity mini-grid company Green Village Electricity. All On provided a grant to Co Creation Hub, Nigeria’s leading tech innovation hub, to seed and incubate up to 10 new companies working to improve access to energy. It also signed a three-year partnership with the US Africa Development Foundation to match their grant funding with debt financing for up to 30 Nigerian off-grid energy providers.

External voice: “Our work helped contain a cholera outbreak”

In 2017, our partnership with SNEPCo provided around 50,000 internally displaced people in the Dikwa area of north-east Nigeria with humanitarian aid in the form of health, water, sanitation, hygiene and nutrition services. The integrated nature of services provided was one of the contributing factors to containing the cholera outbreak in Dikwa.

Satish Raj Pandey
Acting Country Director, Family Health International (FHI 360), Abuja, Nigeria
SOCIAL AND ECONOMIC CONTRIBUTION

- $1.1 billion: Shell share of royalties and corporate taxes paid to the Nigerian government in 2017 (SPDC $0.4 billion, SNEPCo $0.7 billion).
- 94%: Shell companies in Nigeria contracts awarded to Nigerian companies in 2017.
- $0.76 billion: Shell companies in Nigeria spend on contracts awarded to Nigerian companies in 2017.
- 95%: employees of Shell companies in Nigeria are Nigerian citizens in 2017.
- $109.9 million: SPDC JV and SNEPCo contribution to Niger Delta Development Commission in 2017 (Shell share $40.2 million).

NIGERIAN LITIGATION

The authorities in various countries are investigating allegations of bribery and corruption over Shell’s investment in Nigerian oil block OPL 245 and the associated 2011 settlement of litigation. In Italy, Shell and four former Shell employees were remanded to trial commencing in May 2018. We are disappointed by this decision but we believe the trial judges will conclude that there is no case against Shell or its former employees.

SPILL RESPONSE AND PREVENTION

When a leak is identified on SPDC JV or SNEPCo assets, production is suspended and efforts are made to contain any spilled oil as part of our emergency spill response. We carry out this response in compliance with government regulations and in line with other standards at Shell-operated ventures globally. A joint investigation visit team comprising representatives of SPDC, regulators, government security agencies, state government and communities, is dispatched to spill sites to establish the cause, volume of oil spilled and what further action is required.

The vast majority of oil spills in the Niger Delta continue to be caused by crude oil theft or sabotage of pipelines, as well as illegal oil refining. In 2017, close to 90% of the number of oil spills from SPDC JV facilities was due to illegal activities. Regrettably, spills also occur due to operational reasons.

Regardless of the cause, SPDC cleans up and remediates areas impacted by spills that come from its facilities. In the case of operational spills, SPDC also pays compensation to people and communities impacted by the spill. Once the clean-up and remediation are completed, the work is inspected, and, if satisfactory, approved and certified by Nigerian government regulators.

SPDC works with government agencies, non-governmental organisations and communities to prevent and minimise spills from illegal activity. In 2017, we continued air and ground surveillance as well as installing anti-theft mechanisms on equipment and pipelines to mitigate third-party interference and ensure that spills are detected and responded to as quickly as possible. There were daily flights over the pipeline network to identify any new spill incidents or illegal activities.

Since 2012, SPDC has worked with the International Union for Conservation of Nature to enhance remediation techniques and protect biodiversity at sites affected by oil spills in SPDC’s areas of operation in the Niger Delta. In 2017, SPDC launched new initiatives, such as a Niger Delta biodiversity strategy and a toolkit which provides guidance on restoring mangroves that will help to strengthen its remediation and rehabilitation efforts.

CLEAN-UP EFFORTS IN OGONILAND

SPDC is working with the relevant stakeholders to implement the 2011 UN Environmental Programme (UNEP) report on Ogoniland. Over the last six years, SPDC has taken action on all the UNEP recommendations addressed specifically to it as operator of the joint venture and has completed the majority of these recommendations.

The UNEP report recommended the creation of an Ogoni Restoration Fund with $1 billion capital, to be cofunded by the Nigerian government, the SPDC JV and other operators in the area. SPDC is supporting and contributing its share to the fund and on behalf of the SPDC JV made $10 million available in 2017 to help set up the Hydrocarbon Pollution and Remediation Project (HYPREP), a government-led body to clean up contaminated sites.

The body agreed to $33 million in funding for areas such as emergency water supply, scoping of contaminated sites and alternative livelihood programmes.
Throughout 2017, SPDC representatives continued to actively support the clean-up process within the governance framework established in August 2016 by the Nigerian government. Some stakeholders have expressed concern about the pace of reaching decisions and taking action on the clean-up process. The Nigerian government and HYPREP strongly advocate setting up a transparent governance structure before starting actual clean-up.

CLEAN-UP AND REMEDIATION OF BODO
In 2015, SPDC - on behalf of the SPDC JV - and the Bodo community signed a memorandum of understanding granting SPDC access to begin the clean-up of areas affected by two operational spills in 2008. As part of this, two contractors were selected to conduct the clean-up and be overseen by an independent project director. The clean-up project suffered a delay in 2016 and most of 2017 due to difficulties accessing the sites.

After significant engagement with the communities and other stakeholders, managed by the Bodo Mediation Initiative, the clean-up and remediation activities at Bodo started in September 2017. The clean-up will consist of four phases: clean-up of free-phase surface oil; remediation of soil; restoration of mangroves; and monitoring. Should activities continue uninterrupted, the process is expected to take around three years. However, for it to be successful, the repeated re-contamination of remediated sites due to crude oil theft and illegal refining must end.

SPILLS AND RESPONSE DATA
Crude oil theft from SPDC JV’s pipeline network amounted to around 9,000 barrels of oil a day (b/d) in 2017, an increase from around 6,000 b/d in the previous year. The increase in 2017 can in part be explained by the militant-induced shutdown of the Forcados export terminal in 2016, which reduced opportunities for third-party interference. This demonstrates that continued air and ground surveillance as well as the action by the government security forces remain necessary to prevent crude oil theft. Since 2012, SPDC has removed more than 950 illegal theft points.

The number of operational spills from Shell companies in Nigeria increased from eight in 2016 to nine in 2017. However, the volume of oil spilled in operational incidents decreased to 0.1 thousand tonnes compared to 0.3 thousand tonnes in 2016.

The number of sabotage-related spills in 2017 increased to 62 from 48 in 2016. Theft and sabotage caused close to 90% of the number of spills of more than 100 kilograms from SPDC JV pipelines, with the balance being operational spills.

In 2017, 92 sites were remediated and certified (out of 251 identified for this work), with 32 in Ogoniland. During 2017, 84 new sites requiring remediation were identified, of which eight are in Ogoniland. In total, there are 243 oil spill sites that require remediation.

External voice: “We simply cannot blame one party for all the woes in the Niger Delta”

In the past four and half years, initially as co-chairman, and now as chairman, I can confirm that it’s been an intense, prolonged and sometimes quite complex and frustrating process. I’m glad to say that despite all the challenges, we’ve been able to collectively start the clean-up of the polluted sites in Bodo community. We couldn’t have done this without the sustained commitment and tenacity displayed by both SPDC and the Bodo community.

The Bodo mediation process is a delicate process based on trust and confidentiality. As an activist and a constructive critic of some of the practices by the international oil companies in the Niger Delta, I’ve come to realise that responsibilities are shared and we simply cannot blame one party for all the woes in the Niger Delta. Therefore, it would take the collective efforts of the federal, state and local governments, IOCs, civil society and the communities to resolve some of these intricate challenges. What we have achieved so far in the Bodo clean-up exercise is proof that it is possible to do so.

The main priority of the Bodo Mediation Initiative is to ensure that as we move smoothly from phase one to phase two of the clean-up, all parties, in particular the Bodo community and SPDC remain committed to the Initiative’s process and clean-up of the Bodo community.

Inemo Samiama
Chairman of the Bodo Mediation Initiative, Bodo, Nigeria
Shell made significant progress towards the completion of our three-year $30 billion divestment programme, which is an important part of our strategy to reshape into a world-class investment and to strengthen our financial framework.

**HIGHLIGHTS IN 2017**

- We completed divestments worth around $22.3 billion over the period 2016-2017.
- We sold our stake in Australian energy company Woodside Petroleum.
- We sold the majority of our oil sands interests in Canada.
- We completed the sale of a number of UK North Sea assets and our onshore upstream operations in Gabon, and announced the divestment of our upstream business in Ireland.

We made good progress on our 2016-2018 $30 billion divestment programme by the end of 2017, with deals worth $22.3 billion completed.

We sold non-operated shareholdings in assets as well as entire businesses. In each transaction, Shell carried out extensive due diligence to ensure that the buyer had the capabilities to uphold, or even improve, delivery with respect to safety, security, the environment and responsibilities to neighbouring communities.

**DIVESTING CANADIAN OIL SANDS**

In March 2017, we announced the sale of the majority of our oil sands assets to Canadian Natural Resources Limited (Canadian Natural) and reduced its share in the Athabasca Oil Sands Project (AOSP) from 60% to 10%. Canadian Natural became the operator of the AOSP upstream mining assets from June 1, 2017.

We continue to operate the Scotford complex, which includes a bitumen upgrader and the Quest carbon capture and storage project (Shell interest 10%) located next to the refinery and chemical plants.

To ensure a successful transition, we developed an employee engagement plan in line with our Code of Conduct and antitrust requirements to address questions from the 3,000 staff moving to Canadian Natural. We worked with local community and business leaders, including indigenous communities, to respond to questions and concerns. We assumed the financial obligation for agreed communities and encouraged submissions for social investments up to the divestment date. We formalised the handover and assignment of any established future obligations. Once all regulatory approvals were in place and full operational readiness and conditions were met for a safe transition, we transferred assets and operatorship to Canadian Natural.

Throughout the divestment process, we ensured our customers and suppliers were updated on the transaction to manage expectations and ensure there were no service disruptions.

**SELLING GABON ONSHORE INTERESTS**

In March 2017, we announced that after 50 years of activities we would divest all our onshore oil and gas operations and related infrastructure in Gabon. We sold our onshore operated and non-operated interests in the country to Assala Energy Holdings, a new energy company funded by US investment firm The Carlyle Group.

From early in the sales process, we communicated the sensitivity of the ecologically diverse habitat to all potential buyers. During the due diligence process, we contracted an independent social and environmental consultancy to provide insight into the impact of operations in and around the onshore facilities. The Carlyle Group also hired a separate independent consultancy to provide insights and to verify the findings of the original due diligence work.

We engaged a cross section of community, government and non-governmental organisations to explain the divestment and introduce the new owners to the communities likely to be affected. The sale to Assala Energy was agreed with the intention that operations would continue.

We expect Assala Energy to make managing the impact of its operations on biodiversity and communities as high a priority as we did. To date, Assala Energy has confirmed it will continue the Gabon biodiversity programme which we had worked on previously with our research partner the Smithsonian Conservation Biology Institute.
Decommissioning is a priority for Shell. This includes restoring the surroundings of platforms and facilities in line with relevant legislation, while taking our own environmental standards into account.

**HIGHLIGHTS IN 2017**

- In the UK, the single lift of the Brent Delta platform marked the world’s heaviest offshore lift, by the world’s largest construction vessel.
- We submitted decommissioning plans for the Tapti field to Indian authorities.
- We decommissioned the Cougar platform in the USA and donated parts of the structure to an artificial reef programme.

Decommissioning is part of the normal life cycle of every oil and gas structure when a facility reaches the end of its life. A growing number of oil and gas platforms and facilities are ageing so decommissioning will increase over the next few decades. Every decommissioning is different and needs to be tailored to the facility design, the local context and the local legislative requirements. Some of our more complex decommissioning projects take place offshore.

In 2017, we started preparing to decommission the Tapti field, a former BG project in India. We jointly operate the project (Shell interest 30%) with the Indian National Oil Company, Oil and Natural Gas Corporation and Reliance Industries Limited. Production stopped in March 2016 and work is under way to plug 38 wells and close down five platforms and four pipelines. In India more broadly, we contribute to government-led work on the development of regulations and guidelines for decommissioning projects.

In the Gulf of Mexico, we decommissioned the Cougar platform, which has produced more than 31 million barrels of oil over the last two decades. In 2017, we used a specially-designed vessel to lift the top part of the platform and deck, then place it on a barge to be transported to shore for cleaning and recycling or disposal. The same vessel was used to move the platform’s 105 metre tall and 3,000-tonne support structure across about 80 kilometres of open water to its resting place as an artificial reef. We donated the structure to the Louisiana artificial reef programme and made a $619,000 contribution to help maintain and monitor the reef. It will provide a habitat for a variety of marine life, including red snapper and amberjack fish.

In the Brent oil and gas field, which lies in the North Sea between the UK and Norway, preparation for decommissioning the four Brent platforms – Alpha, Bravo, Charlie and Delta – started more than a decade ago. We based our decommissioning recommendation on options from about 300 scientific and technical studies. This work included consultation with around 180 interested parties and an independent review to validate the science and engineering.

In 2015, the UK regulator approved the Brent Delta decommissioning programme to remove the topside of the platform in a single lift. The removal was carried out in April 2017 by Pioneering Spirit, the world’s largest single lift construction vessel, making it the heaviest lift of its kind offshore. The 24,200 tonne lift marked the culmination of about five years of study and engineering work.
Shales – also known as tight gas and oil – continue to play an important role in meeting global energy demand. Shell uses advanced, proven technologies, including hydraulic fracturing, and follow our operating principles to unlock these resources safely and responsibly.

**HIGHLIGHTS IN 2017**

- In Canada, around a third of our water demand in the Fox Creek facility was met by reusing produced water and waste water.
- We recycled produced water at a development in the Permian asset in the USA to significantly reduce groundwater consumption in hydraulic fracturing.
- Our new Waterton radio tower construction project contributed to local conservation efforts in Canada.

Shell expects shales to become a significant growth priority for the company beyond 2020. We are involved in seven shale projects in North America. In Canada, we are active in the Duvernay and Wet Montney oil plays in Alberta along with the Montney gas play in British Columbia. In the US, we are active in the Marcellus and Utica gas plays in Appalachia, the Delaware Basin portion of the Permian play and a non-operated position in the Haynesville gas play. Outside of North America, we are also active in the Vaca Muerta shale play in Argentina.

Shell upholds five global principles, the **Onshore Operating Principles**, which govern the onshore shale activities where we operate and where hydraulic fracturing is used. The principles cover safety, air quality, water protection and usage, footprint and engagement with local communities. We review the principles annually and update them as new technologies, challenges and regulatory requirements emerge. We actively engage with communities, industry participants and other groups to bring about improvements in the sector.

In our operations, we continue to take action to address air quality and control fugitive emissions, reducing the potential for our impact on the environment. We implement voluntary methane leak detection and repair programmes across all our shale sites, by primarily using optical gas imaging cameras. We are also looking at next generation detection technologies.

**IMPROVING WATER USE IN CANADA**

We have worked for several years to improve water management at our facilities in Canada, first in Groundbirch, British Columbia, and then in Fox Creek, Alberta. In August 2017, the Canadian Association of Petroleum Producers recognised Shell’s efforts as an example of industry best practice for water management.

We have taken steps to reduce our overall fresh water footprint and minimise the impact to other water users from our oil and natural gas operations. We have also been looking at ways to reduce overall water demand through completion design and reusing water. Previously, we agreed with the municipality to use Fox Creek’s treated waste water for hydraulic fracturing and in return we
helped upgrade the town’s reclaimed water facilities. In 2017, around a third of Shell’s water demand in the Fox Creek asset was met by produced water and waste water.

We have been pursuing similar initiatives in Groundbirch where we worked with the nearby city of Dawson Creek to build a reclaimed water facility to treat and recycle the city’s waste water for local industries and the community.

Read more about water recycling at our Permian project in Texas.

ADDRESSING ENVIRONMENTAL SENSITIVITIES

When implementing projects, we try to find solutions which minimise impacts on the environment. In 2017, our Waterton Complex in Alberta, Canada, needed to replace a support cable for its communications system. However, the mountainous terrain meant installing a new radio system was the only feasible option. As a result, we had to build two radio towers, including one on a ridge near Waterton Lakes National Park, which involved addressing several environmental sensitivities.

To minimise the environmental impact, we placed the radio tower on the ridge during frozen ground conditions, using track equipment and solar panels. We also installed a watering system for livestock, which protects the habitat in nearby Yarrow Creek, and a new water well with an above ground pipe drilled. We consulted with the local community and landowners throughout the project to ensure it was executed in a way that preserves the local environment and contributes to local conservation efforts.

The communications system works well and was built in collaboration with local landowners and communities.