



NIGERIA BRIEFING NOTES 2021

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COUNTRY CHAIR'S INTRODUCTION



WELCOME TO THE NIGERIA BRIEFING NOTES IN WHICH WE LOOK BACK ON HOW SHELL COMPANIES IN NIGERIA PERFORMED IN 2020.

It was a year when COVID-19 ravaged the global economy and changed all our lives. I'm proud of the contribution Shell Companies in Nigeria were able to make to better health care, increased testing capacity and isolation centres but, first, I would like to thank all the medical and government workers who helped Nigeria through this difficult time. The resilience of my fellow Nigerians continues to encourage me in the future of our country.

I am immensely proud of the Shell Companies in Nigeria. The contribution we make to this country is astounding. Not only in terms of the tax revenue we generate for the nation but also in terms of what we are achieving when it comes to developing gas and increasing access to energy for Nigerians.

We create jobs by investing in large energy projects, by awarding contracts to Nigerian businesses and by employing, training and empowering Nigerians across our businesses. We are building talent, across all our interests and, especially, in natural gas and deep-water exploration. We believe our investments will enrich many areas of the country for the future.



OSAGIE OKUNBOR
Country Chair of Shell Companies in Nigeria.

WE CREATE JOBS BY INVESTING IN LARGE ENERGY PROJECTS



WE'RE HELPING LOCAL COMPANIES SUCCEED THROUGH RELIABLE AND AFFORDABLE POWER



HEALTHWORKERS AT THE OBIO COTTAGE HOSPITAL IN PORT HARCOURT, NIGERIA.

Our gas businesses are working with the federal government to produce and supply energy to Nigerian commercial and industrial hubs. We're helping local companies succeed through reliable and affordable power. But it's not only about our businesses. We believe in increasing access to energy for Nigerians and we therefore have provided funding to All On, a not-for-profit enterprise that finances renewable energy start-ups so that they can provide energy to communities that are off the power grid.

The idea of collaboration lies at the heart of the Shell Companies in Nigeria, with government; with local business partners; with schools, universities and hospitals; and with communities. We know that Nigerians have the power to achieve their own prosperity and we want to help them do that. Our support for health services, education and entrepreneurship shows just how much we value those we work alongside.

We work hard to support communities and they, in turn, engage with us and help us do better, every year. For example, in 2020 we had the lowest volume of oil spilled in at least a decade. This was achieved through an effective pipeline and asset management system, and also through the hard work that goes into forging positive relationships with surrounding communities who then help us.

COVID-19 hit Shell Companies in Nigeria in the same way as the rest of the world. The fact that we rallied, bounced back and produced oil and gas in line with our 5-year average speaks to the resilience and agility of our businesses and our teams. The fact that we also made a significant contribution to Nigeria's COVID-19 response speaks of our commitment to this country.

OSAGIE OKUNBOR
Country Chair of
Shell Companies in Nigeria
Port Harcourt, Nigeria





GOVERNMENT, NON-GOVERNMENTAL ORGANISATIONS AND COMPANIES HAVE A ROLE IN GIVING NIGERIA'S YOUNG POPULATION THE BEST START.



NO SPILL IS ACCEPTABLE. SPDC JV WORKS HARD TO PREVENT THEM.



Shell in Nigeria

SHELL'S INTERESTS IN NIGERIA



Powering the economy

POWERING NIGERIA'S ECONOMY



Cohesive communities

HELPING BUILD COHESIVE COMMUNITIES



Spill prevention

PREVENTING SPILLS IN THE NIGER DELTA



Spill prevention

Cohesive communities

Powering the economy

Shell in Nigeria

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SHELL'S INTERESTS IN NIGERIA

SHELL IN NIGERIA

WORKERS AT A GAS PLANT IN NIGERIA.

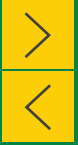
Shell has invested in game-changing businesses in Nigeria for over 60 years and today has interests in several companies that produce and distribute oil, gas, liquefied natural gas (LNG) and other energy products.



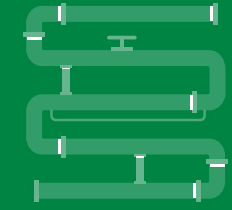
THESE BUSINESSES ARE STRONG FINANCIAL PERFORMERS AND CONTRIBUTE TO ECONOMIC GROWTH IN NIGERIA.

Three businesses are wholly owned by Shell and are known as the Shell Companies in Nigeria (SCiN). They are the Shell Petroleum Development Company of Nigeria Limited (SPDC), which has a 30% share in the SPDC joint venture (SPDC JV) and produces oil and gas in the Niger Delta; the Shell Nigeria Exploration and Production Company Limited (SNEPCo), which operates in the deep waters of the Gulf of Guinea; and Shell Nigeria Gas Limited (SNG), which provides gas to Nigerian industrial and commercial customers.

In addition, Shell Gas B.V. holds a 25.6% shareholding in Nigeria LNG Limited (NLNG), which produces and exports liquefied natural gas to European and other markets.



Major oil export terminals



SIX

Liquefied natural gas (LNG) trains



Deep-water floating production, storage and offloading (FPSO) vessel

150+

Industrial gas customers



The Nigeria Briefing Notes update on activities and programmes undertaken by several Nigerian companies either wholly owned by Shell or in which Shell has an interest. Together, three of these are referred to as the Shell Companies in Nigeria (SCiN).

Shell Petroleum Development Company of Nigeria Limited (SPDC); a wholly-owned Shell subsidiary, which operates an unincorporated joint venture (SPDC JV) in which SPDC holds a 30% interest.

Two other wholly-owned Shell subsidiaries; Shell Nigeria Exploration and Production Company Limited (SNEPCo) and Shell Nigeria Gas Limited (SNG).

The fourth is Nigeria Liquefied Natural Gas (NLNG) Limited; an incorporated joint venture in which Shell B.V. has a 25.6% interest.



SHELL INTERESTS IN THE NIGERIAN OIL & GAS SECTOR

	NAME OF COMPANY	DESCRIPTION AND MAIN ACTIVITIES	OPERATING ASSETS	
HEARTLAND	The Shell Petroleum Development Company of Nigeria Limited (SPDC)	Supplies onshore and shallow water oil and gas to domestic and export market	<p>SPDC JV: Operator and 30% participant interest holder in SPDC joint venture:</p> <ul style="list-style-type: none"> ■ 360 producing oil wells (101 land, 195 west and 64 central assets). ■ 60 producing gas wells (11 land, 4 west and 45 central assets). ■ A network of 4,000 kilometres of oil and gas pipelines and flowlines. 	<ul style="list-style-type: none"> ■ 8 gas plants ■ Two major oil export terminals. ■ One power plant
DEEP-WATER	Shell Nigeria Exploration and Production Company Limited (SNEPCo)	Produces deep-water oil and gas	<p>SNEPCo: Operator of the Bonga field floating production, storage and offloading vessel (FPSO). Interests in two Shell-operated deep-water blocks under production sharing contracts:</p> <ul style="list-style-type: none"> ■ Bonga (OML-118 – 55% interest) and Bolia/Doro (OML-135 – 55% interest). 	<ul style="list-style-type: none"> ■ Interests in two non-operated deep-water blocks: ■ Zabazaba, Etan (OPL-245 – 50% interest) operated by Agip under a production sharing agreement. ■ Ehra (OML-133 – 43.75% interest) operated by Esso under a production sharing contract.
GAS FOR NIGERIA	Shell Nigeria Gas Limited (SNG)	Only Nigerian subsidiary of an international oil company in domestic gas distribution	<p>Operator and 100% Shell share:</p> <ul style="list-style-type: none"> ■ Two LNG trains with processing capacity of over 150 mmscf. ■ Pressure reduction and metering station. ■ Gas transmission and distribution network of approximately 150 kilometres. 	<ul style="list-style-type: none"> ■ Serving over 120 industrial and commercial customers, mostly in Ogun, Abia, and Rivers states. ■ Signed commercial agreements with over 150 companies in Ogun, Abia, Rivers and Bayelsa States. ■ Over 99% of SNG Customer payments are made on time.
GAS FOR EXPORT	Nigeria LNG Limited (NLNG)	Processes and exports liquefied natural gas (LNG)	Nigeria LNG Limited (NLNG) processes and exports liquefied natural gas (LNG). Shell's B.V.'s shareholding in the NLNG Joint Venture is 25.6%:	<ul style="list-style-type: none"> ■ Six LNG trains with total processing capacity of 24.1 million tonnes a year of LNG and up to 5 million tonnes of natural gas liquids (LPG and condensate) from circa 3.5 billion standard cubic feet per day of natural gas. ■ NLNG is serviced by fleet of 23 LNG vessels.



STRONG PERFORMANCE

Performance matches 5-year average despite COVID-19

Nigeria's natural resources offer attractive investment opportunities and significant potential to help raise living standards for its population.

Shell Companies in Nigeria (SCiN) have a track record of strong production and financial performance. 2019 was a record year and 2020 remained strong despite the global health pandemic. This outcome is thanks to a deeply embedded culture of performance and empowering leaders to make faster decisions and find fit-for-purpose solutions.

Production in Nigeria was hit by the pandemic and OPEC quota reductions imposed in response to the global economic slowdown. Output from the SPDC JV and SNEPCo in 2020 fell from the record highs of 2019 but, at around

620,000 barrels of oil equivalent per day, remained close to the 5-year average of 625,000.

Shell is enhancing its portfolio of assets through selective investments in large gas projects, exploration in the Gulf of Guinea and rejuvenation of the SPDC JV's onshore oil and gas production in the Niger Delta by reopening wells. SCiN operate to global Shell standards and have a strong focus on maintaining assets to high standards.

The SPDC JV and SNEPCo production of oil and gas has increased over the past five years and Shell Nigeria Gas (SNG) added another 30 industrial and commercial customers to its books. Shell Gas B.V. and its partners took the decision to expand NLNG's liquefied natural gas (LNG) export operations in Nigeria at the end of 2019.



A TEAM OF WORKERS AT SHELL NIGERIA GAS FACILITY AT AGBARA, OGUN STATE, NIGERIA.

620,000

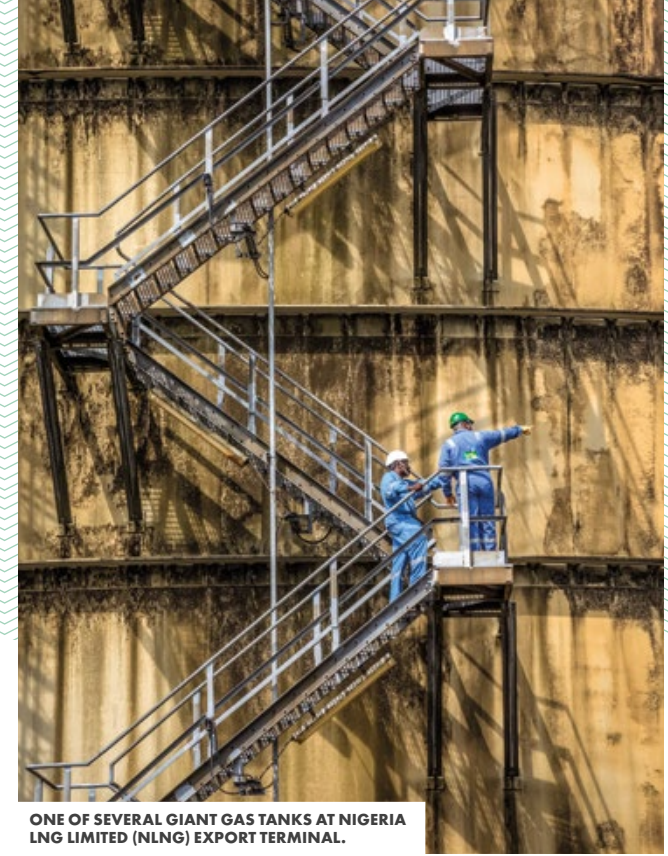
barrels of oil equivalent per day in 2020



SCiN are working with the federal government of Nigeria to build a network of gas plants and pipelines to help bring power to the country’s growing industrial and commercial sectors. This infrastructure will also increase the export of liquefied natural gas (LNG) to meet global demand for power plants and heating. Natural gas emits between 45% and 55% fewer greenhouse gas emissions and less than one-tenth of the air pollutants than coal when used to generate electricity*.

At the same time, SCiN continue to maintain leadership in developing opportunities in the deep waters of the Gulf of Guinea. And in 2020, a range of Shell-branded lubricants was reintroduced to Nigerian customers through a strategic partnership.

	2016	2017	2018	2019	2020
SPDC JV ACTUALS (BOEPD)	368,000	464,000	465,000	514,000	503,000
SNEPCO (BONGA OIL) (BOPD)	203,000	167,000	158,000	164,000	118,000



ONE OF SEVERAL GIANT GAS TANKS AT NIGERIA LNG LIMITED (NLNG) EXPORT TERMINAL.

* <https://www.shell.com/media/news-and-media-releases/2021/2020-lng-demand-holds-steady-despite-covid-19-set-for-growth-as-global-economies-recover.html>



Spill prevention

Cohesive communities

Powering the economy

Shell in Nigeria



^ 8.3%

SPDC JV 2020 daily production vs. 5-year average

∨ 27%

SNEPCO 2020 daily production vs. 5-year average

360mt

LNG global demand

~150

SNG customers



SPOTLIGHT

AGILE RESPONSE TO COVID-19

In 2020, the COVID-19 pandemic sent shockwaves around the world, triggering lockdowns as governments scrambled to protect their citizens. The federal government of Nigeria ordered businesses to close to prevent the spread of the virus.



DONATION OF MEDICAL EQUIPMENT TO THE MINISTRY OF HEALTH, RIVERS STATE, NIGERIA.

Shell Companies in Nigeria (SCiN) responded with agility to the COVID-19 pandemic. SCiN quickly closed their offices and reduced staff on non-critical operations including project sites to protect staff and contractors until safety could be ensured. This helped prevent widespread infection.

Testing and new operating procedures were put in place and activities were opened after just several weeks. However, oil and gas production, construction projects and spill site remediation activities were all impacted.

SCiN's production in Nigeria was hit by the pandemic and OPEC quota reductions imposed in response to the global economic slowdown. Output from SPDC and SNEPCo in 2020 fell from the record highs of 2019, but at around 620,000 barrels of oil equivalent per day remained close to the 5-year average of 625,000.

SCiN's nimble response ensured we adjusted quickly to the new way of things, bouncing back when lockdowns were lifted to continue operating safely and effectively. The actions demonstrated operational and financial resilience and, despite the pandemic, SCiN continued building for the future.

SCiN also contributed significant resources and expertise to help the communities where we operate help fight the spread of the coronavirus.

DESPITE COVID-19, WE ACHIEVED STRONG PRODUCTION LEVELS AND OUR SAFETY PERFORMANCE CONTINUES TO IMPROVE





INTERVIEW

RISING TO THE CHALLENGE OF COVID-19

We speak to **Meshach Maichibi**, SPDC asset manager



Shell in Nigeria briefing notes 2021

Impact

We have made sure of business continuity throughout the pandemic and we intend to continue doing this with the aim that everybody is safe. Despite COVID-19, we achieved strong production levels and our safety performance continues to improve.

Approach

We have created “bubbles” and people have to test negative for COVID-19 before they can go into a bubble. We have reduced staffing to the few crucial people who are needed on site. You can only effectively implement change where you have controls in place. We have what we call our bible – a set of COVID-19 controls that tell us what mitigation we need to take and when.

Hopes

The pandemic motivated us. We improved competences when people stayed longer with a project and learned more. The bonding between colleagues is great. This is the new normal and it’s positive because we are thinking smarter and reducing costs.

Challenges

Bringing everyone home is always going to be my priority. We aim for zero safety incidents.

WE RISE TO THE CHALLENGE

MESHACH MAICHIBI
SPDC Asset Manager





GROWING THE GAS PORTFOLIO

Shell is investing in a gas portfolio that will increase supply for Nigerian and international customers via an expanding network of plants, pipelines and export terminals developed with joint venture partners, the Nigerian government and communities.

Shell has interests in two gas supply operations in Nigeria:

- Nigeria LNG Limited (NLNG, Shell interest 25.6%), and
- the Shell Nigeria Gas Limited (SNG, Shell interest 100%).

Both are supplied with gas by the Shell Petroleum Development Company of Nigeria joint venture (SPDC JV) and the Shell Nigeria Exploration and Production Company Limited (SNEPCo).

Shell Gas B.V. and its partners took a final investment decision at the end of 2019 on a new liquefied natural gas (LNG) processing unit at NLNG. The expansion is expected to create around 12,000 jobs during construction and stimulate growth of the local oil and gas services sector. Construction is expected to take a number of years. Once operational, the new unit, known as "Train 7", will add around 8 million tonnes per annum of capacity to the Bonny Island LNG facility, taking the total to around 30 million tonnes per annum.

NLNG accounts for about 7% of the world's total LNG production. Gas from the SPDC JV and SNEPCo's Bonga deep-water field is piped to the NLNG plant on Bonny Island. Here it is cooled to produce LNG for export to consumers in Atlantic Basin countries, such as Spain, Italy, Turkey, Mexico and the US, as well as markets in Asia.

The [Shell LNG Outlook](#) finds that global demand for LNG increased to 360 million tonnes in 2020. As the world looks increasingly to lower-carbon fuels, it is expected that demand for LNG will continue to grow. Global LNG prices hit a record low early in 2020 but ended the 12-month period at a six-year high as demand in parts of Asia recovered and winter buying increased against tightened supply.

Considerable opportunities lie in supplying Nigeria with gas. Nigeria has a population of more than 200 million and this is expected to double by 2050, so there is enormous potential within the domestic gas market. SNG is the only wholly owned gas distribution subsidiary of an international oil company in Nigeria. It is the fastest growing domestic gas distribution company in Nigeria and is at the forefront of providing domestic gas to industrial customers and manufacturing plants in five Nigerian states.



Click on this link to read about our work with LNG

<https://www.shell.com/energy-and-innovation/natural-gas/liquefied-natural-gas-lng/lng-outlook-2021>

SNG markets gas within Nigeria as a more reliable and affordable alternative to liquid fuels. Its gas is used by local manufacturers to make household consumables, beverages, utensils and hardware. Its customers include Africa's largest plate glass factory and a number of household names. SNG is the only gas distribution company in Nigeria certified according to the ISO14001 international standard for an effective environmental management system.



INTERVIEW

DOMESTIC GAS PROJECTS BRING BENEFITS TO NIGERIANS

We speak to **Abimbola Tijani**, project manager for the Assa North-Ohaji South gas project.



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Impact

This impressive gas development is designed to increase Nigeria’s availability of gas, boosting industrialisation and positively impacting our economy, especially manufacturing and agriculture. The detailed engineering design was executed locally with international support. We are happy that we have delivered a world class design.

Approach

Our team is relatively young and highly talented. We work hard and we are committed to constantly learning from all around us. We actively go in search of lessons from other projects. If a process worked well for another project, we seek to replicate, adapt and adopt.

ABIMBOLA TIJANI
Project Manager

NIGERIA’S CREATIVITY WILL BE FURTHER UNLEASHED

Hopes

It is my belief that through the delivery of more gas and more power, Nigeria’s creativity will be further unleashed. New businesses will spring up and inactive ones will be revived, leading to significant improvements in our living standards. The gas from this project represents opportunity, new dreams and a brighter future.

Challenges

The business environment in Nigeria is fraught with challenges, one of which is financing. We work closely with our contractors as they seek resources to deliver on their scope. We also work with our various stakeholders to manage the non-technical risks that affect a project of this magnitude.





ENDING CONTINUOUS FLARING

The Shell Petroleum Development Company of Nigeria joint venture (SPDC JV) has decreased routine flaring by almost 90% in Nigeria since 2002, turning an environmental problem into a source of energy for Nigerians and a financial flow for the joint venture and the Nigerian government.

Shell Companies in Nigeria (SCiN) have made a series of investments and forged partnerships over the last 20 years to capture and commercialise associated gas for domestic and export markets. Through this programme, greenhouse gas emissions have been reduced and a valuable energy source redirected to domestic and international customers.

Recent examples of gas gathering projects include the Southern Swamp Associated Gas Solutions (SSAGS) project, which was commissioned in 2019-2020, and a significant part of the Forcados Yokri gas-gathering project is set to be completed in 2021. Gas from SSAGS and Forcados will be channelled for domestic use and exported as liquefied natural gas (LNG).

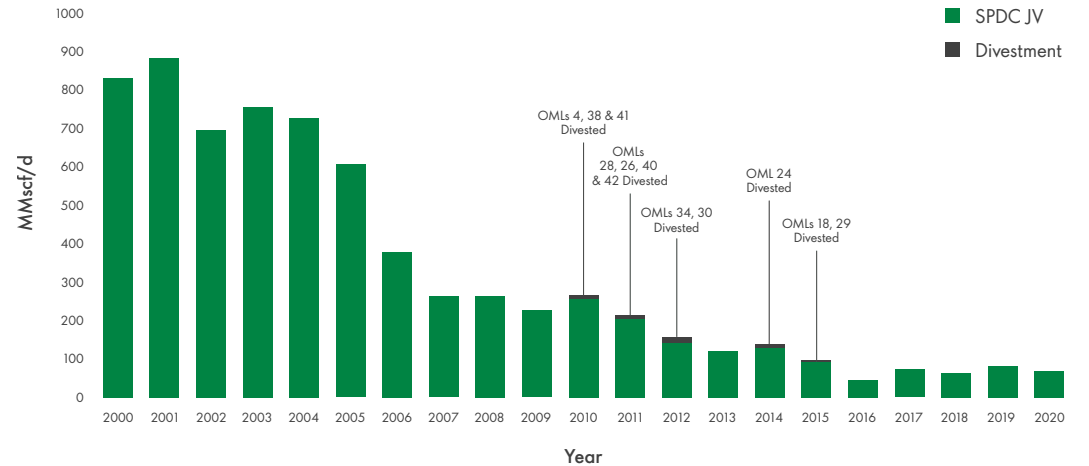
Remaining sites with low-volume flares are in remote areas of Nigeria and the SPDC JV has been working with the federal government and other partners to develop small-scale projects to capture the associated gas for local use. Since 2000, all new SPDC JV facilities are designed to have no continuous flaring.

As a signatory to the World Bank’s “Zero Routine Flaring by 2030” initiative, Shell continues to pursue its 2015 commitment to eliminate associated gas flaring from its operations around the world, including Nigeria.



BRINGING NEW FACILITIES INTO OPERATION THAT COLLECT GAS THAT WAS ONCE FLARED.

SPDC JV is reducing flared gas volumes





DEEP-WATER PRODUCTION EXCEEDS EXPECTATIONS

Today, nearly one-third of Nigeria’s deep-water production comes from the Bonga and Erha fields. Shell Nigeria Exploration and Production Company Limited (SNEPCo, Shell interest 100%) pioneered deep-water oil and gas production from the Bonga field in the Gulf of Guinea where depths reach more than 1,000 metres.

Since production began in 2005, Bonga alone has produced more than 900 million barrels of oil. In 2020, the availability of the floating production, storage and offloading (FPSO) vessel fell to 70% from 94% in 2019 due to the OPEC quota restrictions. For the same reason, SNEPCo’s production in 2020 fell to 118,00 barrels of oil per day from 164,000 barrels in 2019.



ENGINEER CARRIES OUT REGULAR CHECKS ON BARD THE BONGA FLOATING PRODUCTION, STORAGE AND OFFLOADING (FPSO) VESSEL IN THE DEEP WATERS OF THE GULF OF GUINEA.

SNEPCo has interests in four deep-water blocks, two of which it operates. SNEPCo develops and deploys the latest deep-water drilling techniques to reduce drilling times, cut costs and increase production. The Bonga FPSO vessel has a total production capacity of 225,000 barrels of oil per day and 150 standard cubic feet of gas export per day.

SNEPCo usually contributes around 20%* to Shell’s global deep-water oil production and its growth ambitions include expansion of natural gas production. In addition to Bonga, SNEPCo’s exploration activities have led to several significant discoveries of oil and gas over the last two decades, including Bolia and Doro fields (55% Shell interest).

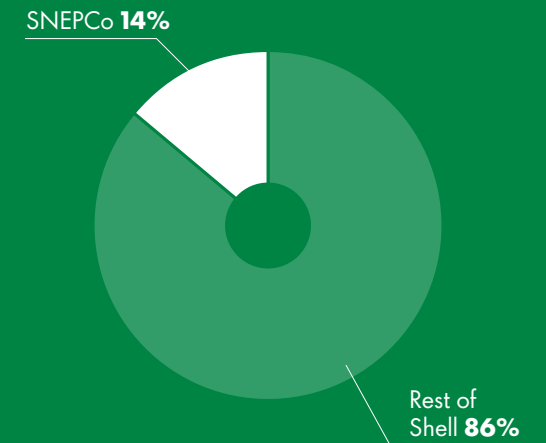
*14% in 2020 due to reductions in productions to accommodate OPEC



Contribution to Shell’s deep-water oil production

14%

Contribution to Shell’s deep-water oil production





Spill prevention

Cohesive communities

Powering the economy

Shell in Nigeria



SPOTLIGHT

BONGA 7TH GENERATION RIG SET WORLD FIRST

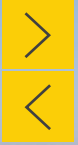
“It’s incredible,” says Elohor Aiboni*, Bonga Asset Operations Manager, describing the rig active over the south-western portion of the Bonga field where Shell Nigeria Exploration and Production Company Limited (SNEPCo) operates.

The secret to SNEPCo’s success is its deployment of the latest proven technology when it comes to exploring and developing the oil and gas fields in the deep waters of the Gulf of Guinea. This 7th generation, twin-decked rig cuts drilling times and costs and was the first in the world to perform a well drilling completion operation in a single trip rather than several.

The operation, completed in 2019, entailed placing valves and delicate instruments in the well. Also, on the Bonga field is a floating production, storage and offloading (FPSO) vessel with a total production capacity of 225,000 barrels of oil per day and 150 standard cubic feet of gas export per day.

The height of a 12-storey building and spanning an area the size of three football fields, the FPSO extracts oil from more than 1,000 metres below sea level. Since production began in 2005, Bonga has produced more than 900 million barrels of oil.

*Elohor Aiboni has been appointed Managing Director of SNEPCo, effective August 1, 2021.



A 7TH GENERATION, STATE-OF-THE-ART, TWIN-DECKED RIG IS ACTIVE OVER THE SOUTH WESTERN PORTION OF THE BONGA FIELD.



INTERVIEW

EMPOWER PEOPLE TO SUCCEED

We speak with **Elohor Aiboni***, the woman who runs Bonga oil and gas production



Shell in Nigeria briefing notes 2021

Impact

Our operational availability is on track. Our safety record is good and we're in control of costs. We've got to ensure that our operational availability remains high and that we stay efficient and safe.

Approach

The magic starts when you empower people. My teams know the asset better than anyone, so we ask them to speak up. We train across multiple disciplines and use digital tools to improve productivity. We keep safe by creating 'family units' that look after each other and celebrate success.

ELOHOR AIBONI

Managing Director of SNEPCo

THE MAGIC STARTS WHEN YOU EMPOWER PEOPLE

Hopes

The Bonga field is prolific and we see a future. It's professionally satisfying to know that we have the technology to get through our drilling campaigns and our cost journey. With the right investment climate, there could be more oil and gas discoveries and the potential to expand and create jobs and opportunities for people.

Challenges

We aim to work up new projects and investment opportunities that meet international standards. Without these opportunities, Shell loses and Nigeria loses. As a Nigerian, I don't want that.

*Elohor Aiboni has been appointed Managing Director of SNEPCo, effective August 1, 2021.





THE NIGER DELTA HEARTLANDS

The Shell Petroleum Development Company of Nigeria joint venture (SPDC JV) focuses on oil and gas production in the Niger Delta. The joint venture has the largest acreage in the country and operates a leased area of 31,000 square kilometres. It produces more than half a million barrels of oil per day on average with capacity to produce more.

The Shell Petroleum Development Company of Nigeria Limited (SPDC), wholly owned by Shell, has a 30% interest in the SPDC JV and is the operator.

Following divestments of some assets in the Warri area of the Niger Delta and the recently announced sale of OML 17 in the eastern Niger Delta, the SPDC JV in line with its current strategic intent continues to streamline its portfolio. SPDC, as the operator, is restoring and repairing oil and gas wells. Many of these wells were either damaged or closed due to previous unrest. In 2020, the SPDC JV reopened a further 24 oil and gas wells.

The SPDC JV's production has shown significant growth over the past five years. Even with the reduced workforce available due to COVID-19 and the OPEC quota cuts, the joint venture produced around 503,000 barrels of oil per day – only a 2% fall on the previous year's production.

Oil and gas is exported to global markets via the Forcados and Bonny Terminals as well as the Sea Eagle floating production storage and offloading (FPSO) vessel. Gas is supplied to the domestic market and to the export market through the Nigeria LNG plant. The SPDC JV supplies approximately 50% of the Nigeria LNG plant capacity, largely from the Gbaran-Ubie and Soku plants.

The SPDC JV has produced neither oil nor gas in Ogoniland since 1993 and has transferred operatorship of its assets in Ogoniland to the Nigerian Petroleum Development Company (NPDC). However, the Trans Niger Pipeline (TNP), which belongs to the SPDC JV and carries crude oil from various companies, passes through Ogoniland. SPDC, as operator, responds to any operational incident that may occur on the TNP, as well as sabotage and theft incidents on the joint venture's assets in the region.



WORKERS AT AN SPDC JV GAS PLANT IN NIGERIA.





INTERVIEW

BUILDING PARTNERSHIPS FOR SUCCESSFUL REMEDIATION

We speak to **Chinyere Ozumba**, SPDC JV's biodiversity and conservation specialist



Shell in Nigeria briefing notes 2021

Impact

We've implemented the IUCN Niger Delta Panel recommendations and now we're improving things through our continued partnership with IUCN. Together, we've done some pilot trials. We have approval from the regulators to implement a risk-based approach on the remediation of oil spills sites.

Approach

We are asking the international and Nigerian remediation and conservation experts to give independent assessments of biodiversity recovery at remediated sites. In the beginning, I felt the experts should be able to discuss the work without SPDC JV representatives. But I soon realised that the experts didn't fully understand the terrain and weren't always aware of the security risks.

CHINYERE OZUMBA
SPDC JV's biodiversity and conservation specialist

WE ARE BUILDING PARTNERSHIPS

Hopes

This project isn't just about the SPDC JV and IUCN. We work with Nigerian NGOs and Nigerian scientists on the ground. We've started conversations. We're building partnerships and this process is holistic. We believe that with this project we can have success.

Challenges

When we go out into the field, we have to get security clearance, we have to take escorts and we cannot be out at night. Sometimes, when the tides are wrong or there are floods, we can't get there. This meant we weren't getting enough time to do monitoring. Now, we have trained locals do some of the monitoring, take photographs and get observations at night.





MAKING A POSITIVE CONTRIBUTION

Shell Companies in Nigeria (SCiN) empower their employees and develop talent for the future.

SCiN invest in people with strong technical and leadership capabilities, giving them the tools and accountability to deliver. SCiN directly employ around 2,700 people and more than 9,000 contractors in Nigeria. The majority of Shell's staff (97%) are local Nigerians.

SCiN also believe in developing Nigeria's talent of the future. The Shell Petroleum Development Company of Nigeria joint venture (SPDC JV) and Shell Nigeria Exploration and Production Company (SNEPCo) fund secondary and tertiary education scholarships. These scholarships have provided opportunities to thousands of Nigerian children in a country where demand for schooling far exceeds supply.

SCiN also invest in affordable and accessible health care to help improve the well-being of the communities where we operate.

SCiN operate to high international standards when it comes to safety, governance, the environment and our impression on neighbouring communities. To achieve this, we encourage strong leadership that empowers employees to act responsibly and we work with all partners to set mutually agreed objectives and implement strategies.

Safety and security remain top priorities and SCiN apply international standards in Nigeria. They work closely with communities, civil society, local businesses and joint venture partners, as well as federal and state government agencies to promote a secure and safe environment. They aim to achieve no harm to people and no leaks across operations.

2,700

employees

9,000

contractors





In Nigeria, SCiN drive safety performance by constantly discussing with staff their challenges and dilemmas. SCiN expect staff and contractors to comply with safety rules and regulations relevant to their work, to intervene to prevent unsafe conditions and to respect fellow workers, the communities in which we work and the environment around us.

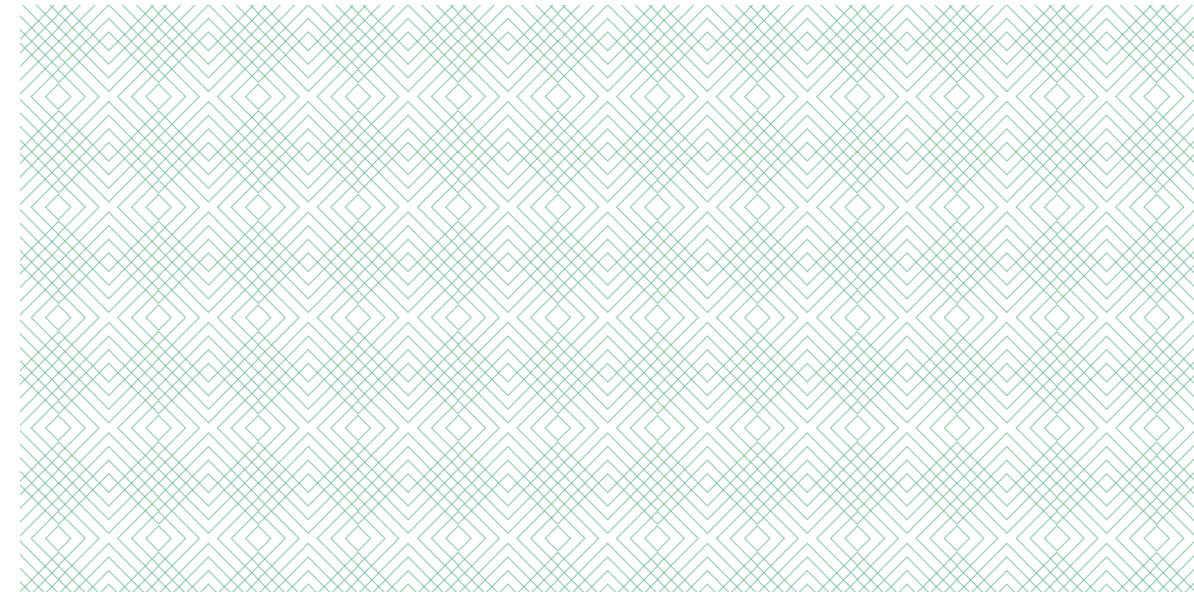
SCiN also continue to contribute to the safety of communities around facilities by responding to third-party emergencies in the communities where they operate. In 2019, they responded to 44 incidents.

When it comes to biodiversity and ecosystems, SCiN seek to make an overall positive contribution where we operate.

SCiN aim to minimise the impact on the environment using a tool called the mitigation hierarchy. Where avoidance is not possible, we aim to minimise our impact and, where necessary, we apply mitigation measures and actively monitor their success. Where our operations have affected biodiversity and the communities that rely on biodiversity for their livelihoods, we seek to help restore impacted habitats.

The International Union for Conservation of Nature (IUCN) and the SPDC JV have worked together since 2012 in Nigeria to enhance remediation techniques and protect biodiversity at sites affected by oil spills. This work includes using bioremediation, a process that uses micro-organisms to naturally break down, and ultimately remove, oil contamination.

In 2017, the SPDC JV and IUCN joined forces on the Niger Delta Biodiversity Technical Advisory Group, which also includes representatives from the Nigerian Conservation Foundation. In 2020, the advisory group assessed the baseline field reports of two pilot sites containing fresh water and swamp forests and set out its aims and timeline for work at the sites. Field visits to the remote locations were disrupted due to COVID-19 restrictions.





SPOTLIGHT

ETHICS AND COMPLIANCE

Shell has a set of core values – honesty, integrity and respect for people – which underpin our strategy and operations around the world.

Shell business principles put strong emphasis on ethical conduct among its employees, with a hotline where concerns can be raised and a unit that investigates incidents and takes tough action – where necessary – against anyone involved in breaches of its code of conduct.

The Shell General Business Principles, Code of Conduct and Ethics and Compliance Manual help Shell employees, contractors and those working in joint ventures that Shell operates act in line with our core values – honesty, integrity and respect for people – and comply with relevant laws and regulations.

For the last three years, Shell Companies in Nigeria (SCiN) have hosted Ethics and Compliance (E&C) events. In 2020, the E&C day was held virtually with online sessions over five days to include in-depth workshops on business integrity, data privacy, harassment, anti-bribery and corruption and anti-money laundering.

The Shell Code of Conduct applies to every employee and contractor who works for or on behalf of Shell. It sets out expected behaviours of Shell employees. Shell’s Ethics and Compliance Manuals build on the Shell General Business Principles and the Shell Code of Conduct to provide practical advice on how to comply with laws and regulations and how to relate to customers, communities and colleagues.

Shell subsidiaries and associates operating in Nigeria are party to various environmental and contractual disputes brought in the courts of Nigeria, England and the Netherlands

Read the response to recent litigation cases here

<https://www.shell.com/media/news-and-media-releases/2021/shell-comments-on-the-verdict-from-the-milan-tribunal-over-opl-245.html>



IN 2020, THE ETHICS AND COMPLIANCE DAY WAS HELD VIRTUALLY WITH ONLINE SESSIONS.





Spill prevention

Cohesive communities

Powering the economy

Shell in Nigeria



POWERING THE ECONOMY



This is the story of how a revolution in energy is driving new economic opportunities in Nigeria.

POWERING THE NIGERIAN ECONOMY





FOR NIGERIANS, ACCESS TO AFFORDABLE, RELIABLE AND CLEANER ENERGY THAT CAN CHANGE THEIR LIVES, THEIR BUSINESSES AND THEIR ECONOMY, IS NOTHING SHORT OF THE OPPORTUNITY OF A GENERATION.

Shell Companies in Nigeria (SCiN) stimulate supply chains, knowledge transfer and employment. SCiN employ Nigerians in all roles and 97% of the around 2,700 employees in the country are nationals. Nigerian staff also work outside Nigeria and share their expertise with their colleagues in Shell's operations around the world.

Shell in Nigeria briefing notes 2021



621k

Barrels of oil equivalent per day produced in 2020



\$900mIn

In taxes and royalties in 2020 (SPDC and SNEPCO)



Ca. 2,700

Employees



\$800mIn

Spent on contracts to Nigerian companies in 2020 (SCiN)

The Nigeria Briefing Notes update on activities and programmes undertaken by several Nigerian companies either wholly owned by Shell or in which Shell has an interest. Together, three of these are referred to as the Shell Companies in Nigeria (SCiN).

Shell Petroleum Development Company of Nigeria Limited (SPDC); a wholly-owned Shell subsidiary, which operates an unincorporated joint venture (SPDC JV) in which SPDC holds a 30% interest.

Two other wholly-owned Shell subsidiaries; Shell Nigeria Exploration and Production Company Limited (SNEPCo) and Shell Nigeria Gas Limited (SNG).

The fourth is Nigeria Liquefied Natural Gas (NLNG) Limited; an incorporated joint venture in which Shell B.V. has a 25.6% interest.



BUILDING THE NATURAL GAS INFRASTRUCTURE FOR WEST AFRICA'S LARGEST ECONOMY

Nigeria can be a West African powerhouse economy of food, fashion, football and industrial goods. The country earns significant revenues from the oil and gas industry, but its dynamic economy is increasingly diverse. By the end of 2020, nearly 95% of Nigeria's gross domestic product was from other sectors of the economy.¹

Energy can be a powerful driver of sustainable development. The federal government of Nigeria is seeking ideas and investment that will modernise the country's energy infrastructure and perhaps pave the way to a more inclusive

¹ Nigerian National Bureau of Statistics GDP Report Q4 and full year 2020

² <https://www.iea.org/countries/Nigeria>

³ <https://www.worldbank.org/en/news/press-release/2020/06/23/nigeria-to-keep-the-lights-on-and-power-its-economy>

economy. Shell Companies in Nigeria (SCiN) can provide the capital, strong governance and technical and project expertise that will all help to unlock opportunities for Nigeria and Nigerians.

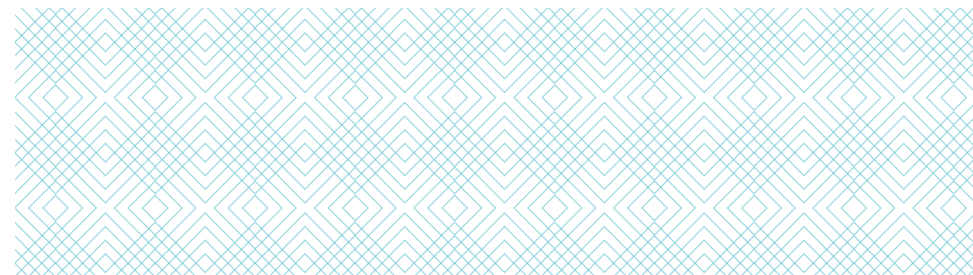
Nigeria has some of Africa's largest reserves of oil and natural gas², giving it the resources to build a prosperous economy for its growing population of around 200 million people. And yet today, development in Nigeria is held back by a lack of infrastructure. Intermittent power from the electricity grid causes power shortages in urban and rural areas. Building energy infrastructure is a priority for Nigerians³, as well as their international customers and investors. SCiN are supporting the development of both on-grid and off-grid energy solutions.



ONE OF SEVERAL GIANT GAS TANKS AT THE NLNG EXPORT TERMINAL.

In 2020, Nigeria's Minister of State for Petroleum Resources, H.E. Timipre Sylva, introduced the National Gas Expansion Program and declared 2020 the 'year of gas' and the start of a 'gas decade' which will see the country utilise its gas resources.

The Shell Petroleum Development Company of Nigeria joint venture (SPDC JV) has long produced oil in the Niger Delta. Today, it aims to produce more natural gas, much of which was once flared, but is now gathered for domestic power supply or exported as liquefied natural gas (LNG).





THE SOUTHERN SWAMP ASSOCIATED GAS SOLUTIONS PROJECT WAS COMMISSIONED.

THE SOUTHERN SWAMP ASSOCIATED GAS SOLUTIONS PROJECT WAS COMMISSIONED

Shell in Nigeria briefing notes 2021



The Southern Swamp Associated Gas Solutions project was commissioned in 2019-2020. The Shell Petroleum Development Company of Nigeria joint venture (SPDC JV) is planning to reduce associated gas flaring further through its Forcados Yokri gas-gathering project, of which large parts are set to be completed in 2021.

The SPDC JV is also working with the federal government and Nigerian National Petroleum Corporation (NNPC) on developing four of the government's seven critical gas supply projects.

One of these projects is the Assa North/Ohaji South Gas Development Project in Imo State where construction began in 2019. The project, with a capacity for 300 million standard cubic feet of gas per day, has the potential to be one of the largest domestic gas projects in Nigeria when completed.

The development aims to help the federal government deliver on its ambition to provide gas for domestic consumption, power generation and gas-based ammonia and urea fertilizers for farmers. The other three projects are in early stages and investment decisions have not been taken. However, if all four projects were completed, together they might be expected to deliver more than three billion standard cubic feet of gas per day for domestic use and export.

The SPDC JV also operates the Gbaran-Ubie gas plant in the heart of the Niger Delta. In 2019, Gbaran-Ubie achieved peak production with about 175,000 barrels of oil equivalent per day – approximately 864 million standard cubic feet per day and 26,000 barrels of condensate per day. Much of this gas is for export but Shell Nigeria Gas Limited (SNG) has signed agreements to supply gas to customers in industrial clusters and parks in Bayelsa State.



UNLOCKING NIGERIA'S NATURAL GAS FOR PROSPERITY

Industrial and commercial customers in Nigeria are demanding reliable, cleaner and more efficient energy products. Natural gas and off-grid renewable energy are at the heart of this development opportunity. Shell Companies in Nigeria (SCiN) are involved in both.

Nigeria has around 202 trillion cubic feet of proven gas reserves and about 600 trillion cubic feet of unproven reserves, according to the government-owned Nigerian National Petroleum Corporation (NNPC).

The federal government of Nigeria has made it an economic priority to harness the potential of its natural resources to bring power and prosperity to its people.

It plans to develop the gas sector to drive the domestic economy and for export as the energy transition demands increased supply of fuels like natural gas*. Natural gas emits between 45% and 55% fewer greenhouse gas emissions and less than one-tenth of the air pollutants than coal when used to generate electricity.

Nigeria currently has around 12 gigawatts (GW) of installed electricity capacity but often less than 5 GW is available in the grid due to transmission capacity and other challenges. The federal government wants to increase this to 25 GW and this represents a huge development opportunity for Nigeria's domestic gas industry. The shortfall in grid electricity is commonly made up for with back-up generators. These are used in their thousands to power everything from manufacturing production lines to air-conditioning in offices and the lights in a market stall.

Only two of Nigeria's 36 states generate more revenue than they receive from the federal government and both have burgeoning commercial centres increasingly powered by natural gas. The first is Lagos with its large manufacturing and services economy and the other is Ogun where a growing industrial cluster, "the Golden Mile", is generating growth.

The federal government has also been working on modernising the governance and regulation of the oil and gas industry to stimulate investment and accelerate the growth of its energy sector. The Petroleum Industry Bill is likely to be granted Presidential assent in 2021.

The Shell Petroleum Development Company joint venture (SPDC JV) is working with the federal government of Nigeria on four of its seven critical gas development projects. The projects are:

- Assa North/Ohaji South field.
- The 4 unitised gas fields – Samabri-Biseni, Akri-Oguta, Ubie-Oshi and Afuo-Ogbainbri.
- Gas supply to Brass Fertilizer Company.
- Okpokunou/Tuomo West field cluster.

The Assa North/Ohaji South gas development project is under construction and is expected to be one of the largest gas facilities in Nigeria. The other three are in early stages of planning.

*<https://www.worldbank.org/en/news/press-release/2020/06/23/nigeria-to-keep-the-lights-on-and-power-its-economy>





SPOTLIGHT

FROM THE NIGER DELTA TO THE STALLS OF ARIARIA MARKET

With about 2 million traders, Ariaria International Market is one of the largest markets in West Africa, renowned for its shoe-making and leather works. The open-air market is located in Aba, a city in Abia State in the southeast of Nigeria.



THE ARIARIA MARKET IN ABIA STATE IS RENOWNED FOR SHOE-MAKING, TAILORING AND LEATHER WORKS.

Traders at the market have traditionally used petrol and diesel generators to power their lights and equipment but Shell Nigeria Gas Limited (SNG) is now supplying natural gas to [Ariaria Market Energy Solutions Limited](#), the Independent Power Project (IPP) consortium that provides electricity to the market. This supply helps to create electricity for the 4,000 businesses. The gas comes from the oil and gas fields of the Niger Delta and is produced by the the Shell Petroleum Development Company of Nigeria joint venture (SPDC JV) which supplies about 10% of Nigeria’s domestic gas.



Find out more and watch, Powering Nigeria’s Largest open-air Market with Natural Gas:

youtu.be/KKjuOZgnnq4



2mln

traders operate at the Ariaria International Market

4,000

businesses potentially supplied with electricity



EXPANDING POWER TO COMMERCIAL AND INDUSTRIAL CUSTOMERS

In a carbon-constrained and environmentally-conscious world, or one that just wants less noise and exhaust smoke from old diesel-run electricity generators, Nigeria's commercial and industrial sectors are looking for energy solutions they can afford and rely on.

Shell Nigeria Gas Limited (SNG), with a transmission network of over 150 kilometres, is at the forefront of connecting natural gas to commercial customers and manufacturing plants.

SNG has quickly grown to supply Nigeria's largest industrial hubs in Lagos and Ogun states and is rapidly expanding into other states. SNG has 120 commercial and industrial customer and has signed agreements with a further 30 customers in Lagos, Ogun, Abia, Rivers and Bayelsa states.

In 2020, SNG completed the final phase of its 20-kilometre domestic gas pipeline expansion project in Abia State. The pipeline connects three key industrial zones and has enabled the supply of gas to an independent consortium that provides electricity to the Ariaria market, and industrial customers including NICEN Industries Ltd.

In 2020, SNG signed a Memorandum of Understanding (MoU) with the Oyo State Government for the acceleration of domestic gas infrastructure development to enable distribution of cleaner and more reliable energy to industries in Oyo State. SNG also began building a large gas processing plant in the city of Aba, Abia State.

SNG has also signed agreements to supply gas to customers in industrial clusters and parks in Bayelsa State.



SNG PLANT.



SPOTLIGHT

GAS BRINGS STABILITY TO BUSINESSES

“Making paints and plastics demands a steady amount of energy. So, it was a big relief when SNG said it wanted to construct a pipeline for gas in Aba. This development will put life back into a lot of industries.

Since SNG has been supplying gas to our premises, we’ve seen costs lowered and downtime reduced to the barest minimum. We can keep up with our customers’ demands and they are happy. More investment should be made in infrastructure to help operations run smoothly.”

CHIEF CHRISTOPHER EZENDIOKWELU
Managing director of NICEN Industries Ltd



Shell in Nigeria briefing notes 2021

“Since SNG started working with us, we have had high-quality service. Even when gas pressure fluctuates, SNG lets us know in time so we can take measures to avoid unnecessary losses. Even during the COVID-19 shutdowns in 2020, SNG ensured a stable supply of natural gas to keep our company’s production and operation going as normal.”

CAI GUO
General manager of CNG GLASS (NIGERIA) FZE



“When it comes to a reliable supply of natural gas, there is no comparison and switching to natural gas 10 years ago was a step we have never regretted. The challenges experienced during the COVID-19 pandemic have reinforced our motivation and proven that natural gas is the way forward for our industry.”

NICOLAS PAULOVITS
Director NOVOGAS



NOVOGAS EMPLOYEES AT WORK.

MORE INVESTMENT SHOULD BE MADE IN INFRASTRUCTURE THOUGH TO HELP OPERATIONS RUN SMOOTHLY





INTERVIEW

HELPING BUSINESSES GROW WITH RELIABLE ENERGY

We speak to **Ed Ubong**, SNG's managing director



Shell in Nigeria briefing notes 2021

Impact

We have helped unlock Nigeria's commercial and industrial sector. Our customers come to us because we provide reliable energy and we're transparent on pricing. With SNG gas, customers can grow their business and employ more people and the state governments can get more revenue.

Approach

We are very transparent with our prices and our readings. We have a one-to-one relationship with each customer and speak to them at least twice every month. We ask them about their plans and what they need to continue to stay ahead of the competition. We agree long-term contracts, which helps everyone plan. Over the last two years, we have expanded from three states into six states.

Hopes

We want to grow. We want to make a difference. We continually ask: How do we change livelihoods? How do we provide? How do we provide a sense of stability? We do this through our infrastructure, through our LiveWIRE programmes, through our financial support to small firms.

Challenges

We encourage government to examine the current regulatory framework to see how it might be improved to attract more investments.

WE WANT TO MAKE A DIFFERENCE

ED UBONG
SNG's Managing Director





SUPPORTING ENERGY START-UPS

Shell aims to provide a reliable electricity supply to 100 million people, primarily in emerging markets by 2030. Nigeria features in that vision. Enterprise development, opportunities for education and access to affordable health care hinge upon access to reliable and cost-effective energy.

For the millions of Nigerians excluded from the country’s power grid, Shell Companies in Nigeria (SCiN) hope that their substantial funding to create a not-for-profit-impact-investing company called All On will bring reliable electricity – often from renewable energy sources – to these urban and rural customers. SCiN provided \$21 million in funding to All On in 2020.



EMPLOYEES ASSEMBLE SOLAR PANELS AT A FACTORY IN LAGOS.

All On was established to boost off-grid supply to homes and small and medium-sized businesses in the Niger Delta. All On aims to help create a more enabling environment for start-ups and to provide them with low-cost financing to expand access to energy to about 5 million people. All On became operational in 2017 and is an independent Nigerian company.

Unreliable power supply in some areas caused great concern during the pandemic about whether COVID-19 testing and treatment facilities would be able to function.

In response, All On announced:

- a \$470,000 (N\$180 million) Solar Relief Fund for renewable energy companies to provide solar power for emergency health centres to help them fight the pandemic.

- a strategic investment in domestic manufacture of solar panels. This reduces strain on foreign currency exchange and makes the panels more readily available.
- a seed-amount grant each to seven energy start-ups, whose innovative products span renewable energy services, including mobile solar-powered charging systems, battery-operated solar generators, waste-to-gas technologies and a patented solar inverter system.





INTERVIEW

GETTING NIGERIANS ENERGY IS WHAT WE DO

We speak to **Dr. Wiebe Boer**, CEO, All On



Impact

Nigerians deserve more reliable energy. Positive change is coming. Already All On has invested in 30 off-grid energy companies and two funds, leading to 29,500 new connections for low income households and businesses. The journey is just beginning.

Approach

Getting Nigerians energy is what we do. Today, grid electricity can be unreliable and back-up generators are expensive and noisy. We help finance businesses that use emerging clean energy technologies to support the creation and growth of sustainable off-grid energy businesses for urban and rural customers.

AFFORDABLE, AVAILABLE ENERGY CHANGES LIVES

DR. WIEBE BOER
CEO, All On

Hopes

Affordable, available energy changes lives. School kids can do their homework, agriculture products can be processed and preserved, businesses can thrive, and hospitals and schools can function.

Challenges

About 75% of Nigerian households and small businesses are either off-grid or have poor-grid connection. The scale of the energy access gap in Nigeria is a formidable and urgent problem. My challenge is how I get things done fast enough to make a significant impact without compromising on safety, quality, or anything else.





INTERVIEW

START-UP BRINGS POWER TO PEOPLE AND HELPS PROTECT LOCAL ECONOMIES

We speak to **Ifeanyi B. Orajaka**, managing director, GVE Projects Ltd., a beneficiary of All On



Shell in Nigeria briefing notes 2021

Impact

Before we brought solar energy to our customers, these households had no access to electricity. We've helped transform their lives. Solar energy has slowed the flow of people leaving these communities for the cities. Today we are a leading renewable energy solution provider with operations in eight states, serving over 11,000 households.

Approach

We regularly speak to people asking them what would give them confidence in solar. We're rolling out initiatives and programmes that would drive renewable energy solutions across the country. We're also constantly updating potential investors to attract the right support for growing the business.

Hopes

Our ambition is to help reduce the energy gap by helping to meet the energy needs of Nigeria's population in the coming years.

Challenges

Raising awareness among people and regulators is a challenge. This requires constant engagement and visits to communities. We also need to identify and hire people with the right skills to help lead our organisation to the next level.

IFEANYI B. ORAJAKA

Managing Director, GVE Projects Ltd

IT'S BEEN A REALLY EXCITING JOURNEY





SPOTLIGHT

SUSTAINABLE DEVELOPMENT THROUGH ACCESS TO ENERGY

“When it comes to achieving Sustainable Development Goal 7, Nigeria is one of the most important countries globally. Our collective effort in Nigeria shows how data, policy and finance working in unison can accelerate progress on this goal.”



DAMILOLA OGUNBIYI
CEO and Special Representative of the UN Secretary-General for Sustainable Energy for All and Co-Chair of UN-Energy

“The U.S. African Development Foundation (USADF) and All On entered a partnership in 2017 with the objective of expanding access to energy in Nigeria. Since its inception, USADF and All On have awarded \$2.4 million in blended finance (grants and loans) to 24 Nigerian-owned SMEs, positively impacting thousands of lives and livelihoods and aiding the growth of Nigeria’s renewable energy sector.”

C.D. GLIN
President and CEO U.S. African Development Foundation





HUGE INVESTMENT IN GLOBAL GAS

Global demand for liquefied natural gas (LNG) continues to grow and Shell is investing in Nigeria’s gas infrastructure so that the country can benefit even more from export revenues.

The [Shell LNG Outlook](#) finds that global demand for LNG increased to 360 million tonnes in 2020. Though marginal, the increase in volume reflects the resilience and flexibility of the global LNG market in 2020, despite being a year which saw losses to global GDP as economies large and small struggled to contain the COVID-19 outbreak.

Shell Gas B.V. and its partners took a final investment decision at the end of 2019 on a new LNG processing unit at Nigeria LNG Limited (NLNG). The expansion is expected to create around 12,000 jobs during construction and stimulate growth of the local oil and gas services sector. The new unit, known as Train 7, is expected to add around 8 million tonnes per annum of capacity to the Bonny Island facility, taking the total to around 30 million tonnes per annum. Construction is expected to take a number of years.

The expansion would ensure Nigeria’s continued place as a global player in an energy source that helps replace coal-use in power plants. Natural gas emits between 45% and 55% fewer greenhouse gas emissions and less than one-tenth of the air pollutants than coal when used to generate electricity.



shell.com/energy-and-innovation/natural-gas/liquefied-natural-gas-lng/lng-outlook-2021

360mt

Global demand for LNG grew in 2020 to 360 MT



WORKERS AT THE LIQUEFIED NATURAL GAS (LNG) EXPORT TERMINAL AT BONNY ISLAND, NIGERIA WHICH NLNG DECIDED TO EXPAND IN 2020.





DEVELOPING DEEP-WATER EXPERTISE

Shell honed its deep-water skills in the United States of America and three decades ago brought this expertise to Nigeria. The Shell Nigeria Exploration and Production Company Limited's (SNEPCo) vision is simple: to be the best deep-water business in the world.

SNEPCo pioneered the advance into Nigeria's deep-water frontier and today its operation is run by Nigerians and usually contributes around 20% to Shell's total deep-water oil production.

The development of the Bonga field by SNEPCo gave rise to the first generation of Nigerian deep-water oil and gas engineers. SNEPCo was the first Nigerian company to venture into the deep waters of the Gulf of Guinea and this required the application of cutting-edge technology. SNEPCo hired Nigerian engineers who

cut their teeth on this project, developing knowledge and skills that would advance the country's oil and gas sector.

Since 2010, industry-wide production from these deep-water fields has added more than 930,000 barrels per day to Nigeria's total oil output, which is around 2 million barrels per day. The Gulf of Guinea continues to offer opportunity and in the right investment and regulatory environment, SNEPCo will consider expanding its Bonga operations into Bonga North and Bonga South West where the company has a 55% shareholding.

SNEPCo continues to cultivate Nigerian engineers through its annual university scholarships programme. This initiative which includes opportunity for an internship, mentorship from volunteer SNEPCo staff and a full-range health insurance coverage, is targeted at promoting academic excellence and

improving skills of young Nigerians in relevant courses, with a view to building a competent skill pool for the oil and gas industry.

In 2020, 31 Nigerian academics and research interns joined in the annual SNEPCo and SPDC JV sabbatical programme and research internship – the highest number of participants in the 40-year history of the programme.

The programmes provide Shell Companies in Nigeria (SCiN) with specialised services, while the participants acquire industry experience and exposure to new technologies that can be introduced into the university curriculum and which cover areas such as biodiversity, petroleum engineering, geophysics, environmental impact assessment, community and occupational health, oil spills remediation, social performance, and oil and gas exploration.

In addition to this, the Shell Petroleum Development Company of Nigeria joint venture (SPDC JV) established an ultra-modern [Marine and Offshore Engineering Centre of Excellence](#) (MCOE) in Bonny, an Atlantic port in Rivers State. MCOE contributes to developing maritime skills and keeping them in Nigeria. Courses include liquid cargo operations; marine engineering high voltage training; emergency response; marine navigation; human elements leadership management; and simulator ship handling training.





INVESTING IN BUSINESS DEVELOPMENT, SPECIALIST SKILLS, TRAINING AND EDUCATION

A country's economic success depends on its access to energy but also on investment in education and training for individuals, and access to finance and contracting opportunities for companies.

Shell Companies in Nigeria (SCiN) respond to this need through core business activities and through investing some \$50 million each year in community, education, health and entrepreneurship programmes.

SCiN employees in Nigeria work to global standards, are exposed to ideas and training and are empowered to make decisions and deliver. However, talent building starts through support for Nigerian students via its social investment initiatives. SCiN also provide specialised training for semi-skilled Nigerians to work in the energy industry as welders and scaffolders, for example.

The development of strong supply chains in Nigeria can benefit local economies and communities but small and medium-sized companies sometimes struggle to achieve the necessary certification for their products and services. This can prevent them from qualifying for tenders and contracts to provide goods and services. A lack of capital can also hinder companies from competing for and executing contracts effectively.

In 2020, 100% of SCiN contracts, worth \$800 million were awarded to Nigerian companies. SCiN have also provided access to nearly \$1.5 billion in loans to 764 Nigerian vendors under the Shell Contractor Support Fund since 2012. These loans help improve tendering opportunities.

SCiN's activities continue to help create Nigerian businesses that can provide technical and support services to the industry. This includes the manufacture of tools and technical kits, the operation of helicopter flights in the Niger Delta, strategic partnerships between foreign and local companies to stimulate technology transfer and capacity development.

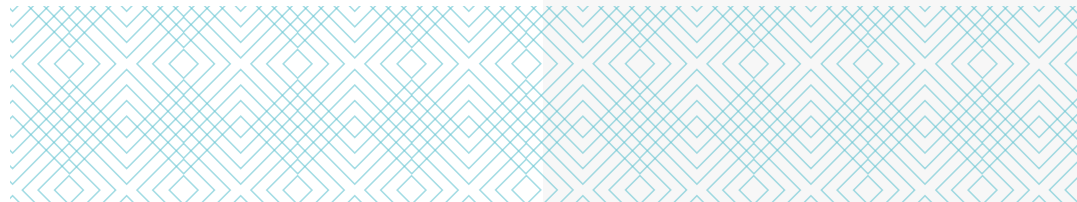


100%

of Shell Companies in Nigeria contracts worth \$800 million were awarded to Nigerian companies

\$1.5bln

in loans to 764 Nigerian vendors under the Shell Contractor Support Fund since 2012





HELPING TO BUILD LOCAL BUSINESSES

Shell Companies in Nigeria (SCiN) contribute to the development of the Nigerian business sector by contracting local companies.

Shell Nigeria Exploration and Production Company (SNEPCo) has awarded major engineering and construction contracts to companies that are indigenous, have local staff, or possess domestic capabilities in the country. These companies were involved in the installation of new production manifolds, subsea umbilical systems, oil production and water injection flowlines. SNEPCo continues to use local companies.

Take the Bonga FPSO, for example. During the COVID-19 lockdown, it wasn't possible to send equipment overseas for maintenance and yet a crucial compressor required an overhaul.

Shell in Nigeria briefing notes 2021

"We identified a local company and my team worked with them. We got it done and we will continue to build local capacity as much as possible."

ELOHOR AIBONI
Asset Manager Bonga FPSO



SNEPCO CONTRIBUTES TO THE DEVELOPMENT OF NIGERIAN ENGINEERING.





INTERVIEW

THE MORE LOCAL CONTRACTORS DO, THE BETTER THEY GET

We speak with **Adam Bradley**, who manages Bonga South West Aparo



Shell in Nigeria briefing notes 2021

Impact

There is a much stronger ambition now to build Nigerian capability. Creating investment stability with enabling terms and lease extension will spark a renaissance for the Nigerian deep-water oil and gas industry.

Approach

We need to continue having rational, professional discussions with government stakeholders about developing local businesses. The more projects we get, the better it is for developing capability. It's like with anything, the more you practice the better you get. Contracting transparency and ethics is essential.

Hopes

I'm optimistic. The talent, understanding and eagerness to deliver a project like Bonga South West Aparo is here. If we collectively get the enablers right, it will bring back the activity and growth beyond what we've previously seen in Nigeria.

Challenges

Nigerian capability will need rebuilding and the cost of that must be spread across developments.

IT'S BEEN A REALLY EXCITING JOURNEY FOR US AND FOR THE PEOPLE TO WHOM WE'VE BROUGHT ELECTRICITY

ADAM BRADLEY

Bonga South West Aparo Manager





HELPING BUILD COHESIVE COMMUNITIES

COHESIVE COMMUNITIES

Nigeria is a thriving and vibrant country, offering opportunities for people to improve their livelihoods.





THE SCALE OF THE OPPORTUNITY FOR NIGERIA IS MIRRORED BY THE SCALE OF THE CHALLENGES. THE GOVERNMENT, NON-GOVERNMENTAL ORGANISATIONS (NGOS) AND COMPANIES HAVE A ROLE TO PLAY, ESPECIALLY DURING A GLOBAL PANDEMIC.

Shell Companies in Nigeria (SCiN) and joint venture partners have made direct voluntary social investments of \$40 million to \$50 million each year over the last five years to help improve the lives of millions of Nigerians. These social investments are targeted at health-care and education initiatives and supporting young Nigerian entrepreneurs.

Shell in Nigeria briefing notes 2021



\$49.4mln

In direct social investment in 2020 (The SPDC JV, SNEPCo and SNG)

100,000

people have benefitted from Health in Motion



Community-driven programmes since 2017 worth (SPDC JV)

\$87.3mln

6,000+

University grants since 2011 (SCiN)

The Nigeria Briefing Notes update on activities and programmes undertaken by several Nigerian companies either wholly owned by Shell or in which Shell has an interest. Together, three of these are referred to as the Shell Companies in Nigeria (SCiN).

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The fourth is Nigeria Liquefied Natural Gas (NLNG) Limited; an incorporated joint venture in which Shell B.V. has a 25.6% interest.



SOCIAL INVESTMENT IN NIGERIA

Social investment programmes in Nigeria are delivered through collaboration and cooperation with communities, schools, universities, health services, civil society and often alongside state governments and institutions. Most programmes extend over decades to ensure a sustainable and lasting positive impact.

Shell Companies in Nigeria (SCiN) undertake two types of voluntary social investment activities:

- **Direct social investment** across Nigeria, which focuses on community and enterprise development, education, community health, access-to-energy, road safety, and since 2018, biodiversity.
- **Community-driven development** programmes and initiatives in the Niger Delta, which focus on various themes as determined by benefiting communities, which are delivered through a Global Memorandum of Understanding (GMoU). A GMoU is an agreement between the Shell Petroleum Development Company of Nigeria joint venture (SPDC JV) and a cluster of several communities.

SCiN are asked to contribute to many good causes, but we believe that affordable quality health care, education and entrepreneurialism are critical enablers to any community. They improve the quality of life for individuals, strengthen families, and offer better livelihood prospects for current and future generations.

SCiN also provide support for humanitarian and safety programmes, such as those providing relief to displaced persons in north-eastern Nigeria or training for emergency workers.



Find out more and watch, Providing Community health in Nigeria with Affordable Insurance:

youtu.be/4rzMEvwtDik





SPOTLIGHT

COMMUNITY-LED SOCIAL INVESTMENT INITIATIVES

The Shell Petroleum Development Company of Nigeria joint venture (SPDC JV) delivers much of its social investment through community-driven programmes and initiatives in the Niger Delta. Community-driven programmes are determined by the communities themselves and delivered through a Global Memorandum of Understanding (GMoU) between the SPDC JV and a cluster of several communities.

Clusters are based on local government or clan/historical affinity lines as advised by the relevant state government. There are currently 40 active GMoUs in Abia, Bayelsa, Delta, Imo and Rivers States. In 2020, the SPDC JV renewed six GMoUs and entered into a new one.

Since introducing GMoUs in 2006 as a new way of working with communities, the SPDC JV, has disbursed more than \$250 million to communities.

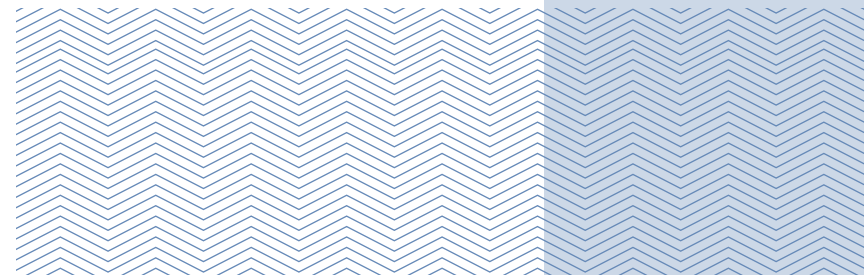
Under the terms of the GMoUs, the communities implement development projects of their choice, while the SPDC JV provides secure funding for five years.

This ensures the communities have stable and reliable finances as they undertake the implementation of their community development plans. GMoU projects can cover community health, education, enterprise development and social infrastructure, such as improved water and power supply, and sanitation.

The GMoUs represent an important shift in approach, placing emphasis on more transparent and accountable processes, intensified communication with the grassroots, sustainable solutions and stronger communities.

\$250mln

to communities since introducing GMoUs in 2006 as a new way of working with communities





COVID-19 RESPONSE SUPPORT

Shell Companies in Nigeria (SCiN) responded quickly with money, materials and actions to help protect staff, contractors, the communities where we operate and to lend support to the Nigerian state and federal governments.

The response built on decades of support for Nigerian health services and so SCiN could move quickly to donate ambulances, ventilators, testing machines and kits, medical consumables and personal protection equipment to seven states.

In addition to donations of critical equipment and supplies, SCiN, contractors and employees set up free feeding programmes in isolation centres for COVID-19 infected individuals in seven states. The programmes hinged

on partnership – collaboration with the state governments, non-government organisations and certified caterers to provide freshly cooked meals daily to patients and health-care workers at the isolation centres. This intervention has provided almost 50,000 meals to infected individuals in the isolation centres.

Dr. Chikwe Ihekweazu, Director General at The Nigeria Centre for Disease Control (NCDC), commended SCiN for their critical support to the country’s response activities to COVID-19, as they did during the 2014 Ebola outbreak.

“The support from Shell Companies in Nigeria came at a crucial time. It enabled NCDC to access medical and laboratory supplies and accelerated creation of testing capacity for COVID-19. We look forward to developing our collaboration further, for outbreak preparedness and response.”



COVID-19 FEEDING SUPPORT FOR PATIENTS AND FRONTLINE HEALTH WORKERS



SHELL COMPANIES IN NIGERIA (SCIN) RESPONDED QUICKLY TO COVID-19 WITH MONEY, MATERIALS AND VOLUNTEERS.



INTERVIEW



IT'S NOT JUST ABOUT OIL

We speak to **Dr. Akinwumi Fajola**, who leads SPDC's approach to supporting healthy communities



Shell in Nigeria briefing notes 2021

Impact

Health for SPDC is about what we do inside the fence and outside the fence. During the pandemic we have continued bring valuable health support to our people and to the people in our communities.

Approach

During COVID-19, the Shell Companies in Nigeria took a strategic decision to support Nigeria in fighting the spread of the virus. We boosted the testing capacity of the country. We helped set up molecular laboratories with diagnostic testing machines, with other medical equipment, with ambulances. We also helped disseminate information through our radio programmes to the general public.

Hopes

It's not just about oil and gas. It's about bringing value to people. It's about being able to be a force for good for people in your country. This is what I hope will continue.

Challenges

There are many challenges during this pandemic. We have to work even more closely with all stakeholders on a daily basis. We need to continually secure government approvals for production to continue and for us to maintain the COVID-19 "bubbles" and move our people safely across fields.

WE DO MORE THAN JUST KEEP OUR OWN PEOPLE SAFE

DR. AKINWUMI FAJOLA
Manager Regional Community Health



INTERVIEW



PROVIDING SUSTENANCE TO HEALTH WORKERS AND PATIENTS

We speak to **Dr. Ferdinand Oshonwoh**, executive director, House of Renaissance for Health Initiative.



Shell in Nigeria briefing notes 2021

Impact

The COVID-19 Feeding Support Programme was novel. The SPDC JV provided food to workers and patients in select isolation centres. The support gave a human face to the pandemic and reduced the financial burden on patients and the government.

Approach

The SPDC JV marshalled this programme, strengthening clinical governance and boosting the morale of frontline workers. We were able to accommodate for the dietary variance of patients with underlying medical conditions, delivered timely meal services and introduced a monitoring tool to assess the quality and timeliness of meals.

Hopes

Our lengthy collaboration with the SPDC JV is borne out of the fact that we both want to make life better for communities. We continue to learn so much and our desire is to continue to work together and strengthen this collaboration.

Challenges

When the outbreak happened, emphasis was put on ventilators and other medical suppliers. Food was often overlooked. Never forget that a sick man must eat if he is to recover. It saves lives.

DR. FERDINAND OSHONWOH
Executive Director, House of Renaissance for Health Initiative

IT SAVES LIVES



SPOTLIGHT

Spill prevention

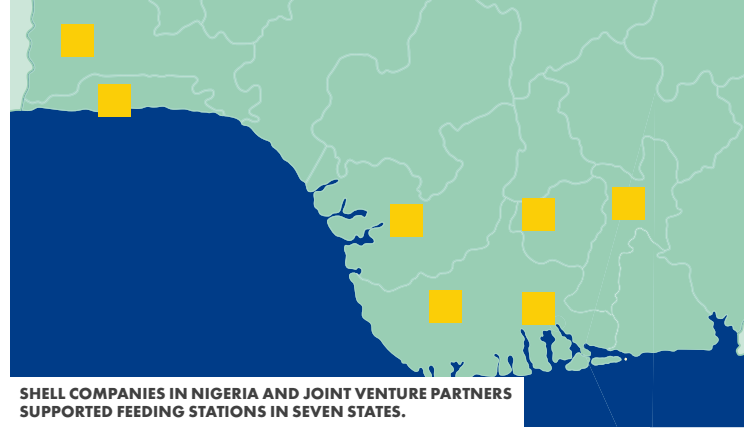
Cohesive communities

Powering the economy

Shell in Nigeria

FEEDING PROGRAMME IN ISOLATION CENTRES

“As we are working here, we don’t really have time for ourselves and the food goes a long way,” said one of the nurses at the Yaba Isolation Centre in Lagos where Shell collaborated with the NGO Rhoda’s Haven Network on a feeding programme during the COVID-19 pandemic.



SHELL COMPANIES IN NIGERIA AND JOINT VENTURE PARTNERS SUPPORTED FEEDING STATIONS IN SEVEN STATES.

“The impact of the support has been profound. On an emotional level, the beneficiaries felt cared for and loved amid the uncertainties surrounding their ill health. On the other hand, the provision of daily lunch afforded the beneficiaries with a much-needed respite financially,” said Dr. Bowale Abimbola, Medical Director and CEO of the Rhoda’s Haven Network NGO, which partnered with Shell Companies in Nigeria on feeding programmes in isolation centres during the COVID-19 pandemic.



SHELL COMPANIES IN NIGERIA (SCIN) RESPONDED QUICKLY TO COVID-19 WITH MONEY, MATERIALS AND ACTIONS TO PROTECT STAFF, CONTRACTORS, THE COMMUNITIES WHERE WE OPERATE.



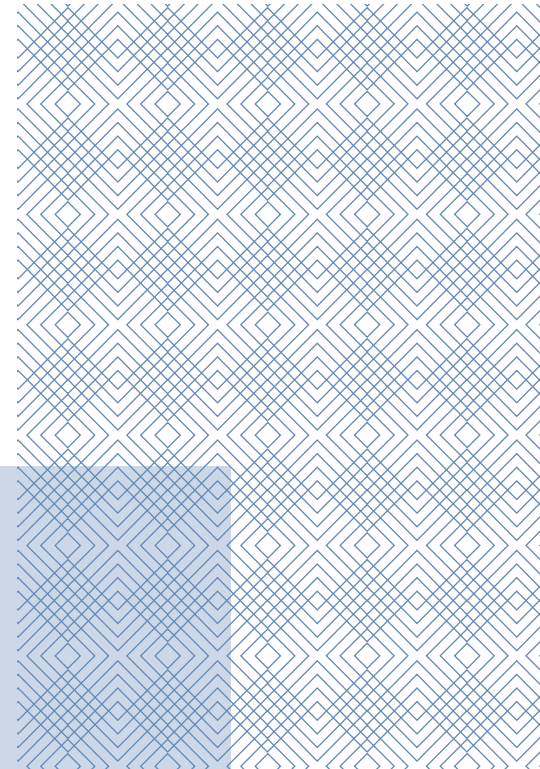


PROVIDING HUMANITARIAN ASSISTANCE

Shell Companies in Nigeria (SCiN) respond to calls for support for humanitarian programmes, such as those providing relief to people displaced by internal conflicts, training for emergency workers or helping communities hit by floods.

Since 2018, the Shell Petroleum Development Company of Nigeria joint venture (SPDC JV) and Shell Nigeria Exploration and Production Company (SNEPCo) have committed \$6 million to the government-driven strategic intervention projects for internally displaced persons (IDP) in Yobe and Borno states in north-eastern Nigeria. By the end of 2019, food, essential hygiene kits and other relief items had been distributed to over 5,500 vulnerable households. The SPDC JV also contributed to a project to repair and upgrade of schools, public water, toilet facilities and a health-care centre in Yobe State.

Shell and SCiN also have relationships with Mercy Corps and Family Health International programmes, which have benefited over 70,000 internally displaced persons in north-eastern Nigeria. The programmes focus on immediate relief and critical support related to health, water and sanitation, education and shelter.



\$6mIn

committed to the government-driven strategic intervention projects for internally displaced persons

5,500

vulnerable households receive food, essential hygiene kits and other relief items had been distributed to



SPOTLIGHT

REBUILDING HEALTH SERVICES FOR PEOPLE DISPLACED BY INSURGENCY

For many years, the Shell Petroleum Development Company of Nigeria joint venture (SPDC JV) and Shell Nigeria Exploration and Production Company (SNEPCo) have supported humanitarian programmes in Nigeria to save lives, especially during crisis and disaster.

Towards the end of 2019, reconstruction began on two primary health centres for people made homeless by the insurgency in north-eastern Nigeria. The Fika Primary Health Centre in Yobe State, commissioned in 2020, and a 20-bed health facility in Dikwa Community in Borno State will both include solar-powered water facilities.

“This investment has brought smiles to the faces of beneficiaries and key stakeholders. We particularly appreciate the hands-on team approach of the project management team, the guidance provided by them,” said **Dr. Hadiza Khamofu**, director of **FH1360 Nigeria**, the NGO we work with.

The SPDC JV also supported specialised health care services for over 3,670 people, including 125 people who benefited from cataract and general surgery.



DR. HADIZA KHAMOFU, DIRECTOR OF FH1360 NIGERIA.



AFFORDABLE AND QUALITY HEALTH CARE

Affordable quality health care improves life outcomes and strengthens families, educational attainment and business opportunities. Shell Companies in Nigeria (SCiN) have supported community health programmes in Nigeria since the 1980s that have benefited many hundreds of thousands of Nigerians. These programmes have included equipment and pharmaceutical donations, emergency care and screening services, hospital maintenance and focused interventions on HIV/AIDS, malaria, cancer and vision care.

Today, SCiN seek to help Nigerian communities increase access to health services, expand health insurance schemes and strengthen health systems. SCiN continue to work with key stakeholders to achieve greater health coverage by increasing access to health and the uptake of services in the communities.

The Shell Petroleum Development Company of Nigeria joint venture (SPDC JV) and the Shell Nigeria Exploration & Production Company (SNEPCo) support 19 health-care centres and signature intervention projects throughout Nigeria:

- **The Community Health Insurance Scheme (CHIS)** is a partnership between the SPDC JV, Rivers State Government and local communities. The programme improves people's access to affordable, quality health care. It costs individuals \$27 per year and covers about 95% of people's health care needs. Since inception, more than 75,000 people have been enrolled. Fourteen thousand individuals enrolled in 2020.
- **The Oloibiri Health Programme (OHP)** is a SPDC JV-sponsored local government initiative in the Ogbia area of Bayelsa State. The initiative strengthens local health-care systems



HEALTHWORKERS AT THE OBO COTTAGE HOSPITAL IN PORT HARCOURT, NIGERIA.





by upgrading and integrating facilities, training and supporting local health-care and community workers and ensuring a reliable supply of medicines. Since its launch in 2017, the programme has seen a four-fold increase in service utilisation to 3,849 patients in 2020.

- **The Obio Cottage Hospital** is a specialist maternity hospital in Port Harcourt supporting families at a crucial moment in their lives. It is funded by the Community Health Insurance Scheme. It has specialist pre- and post-natal wards and an operating theatre. Since 2010 nearly 30,000 babies have been safely delivered at the hospital.
- **Health-in-Motion (HIM)** is a mobile community health outreach programme that takes free medical services to where people live and work. Created in the 1980s, around 100,000 people have benefited from the programme in just the last five years. Unfortunately, the programme was able to reach fewer people than normal in 2020 due to COVID-19 restrictions.



MORE THAN 30,000 BABIES HAVE BEEN SAFELY DELIVERED AT THE OBIO COTTAGE HOSPITAL SINCE 2010.

SUMMARY OF HEALTH IN MOTION STATISTICS IN THE LAST 5 YEARS

Health in motion programmes	Communities reached	Beneficiaries	Blood pressure	Eye care	HIV C&T	Dental Care	Blood Cholesterol	Blood Sugar	Immunisation	Treatment	Deworming	Treated for Malaria
TOTAL HEALTH IN MOTION CONDUCTED IN 2016	142	14,803	8,150	2,231	6,071	1,0448	3,173	5,040	0	6,907	3,060	1,471
TOTAL HEALTH IN MOTION CONDUCTED IN 2017	226	28,158	3,123	4,296	7,466	1,811	2,840	5,027	605	8,889	8,236	1,332
TOTAL HEALTH IN MOTION CONDUCTED IN 2018	45	29,920	9,105	5,093	8,440	3,993	3,734	4,964	0	14,346	11,901	2,047
TOTAL HEALTH IN MOTION CONDUCTED IN 2019	32	24,040	10,019	4,286	7,371	2,491	5,002	5,724	0	12,225	10,985	811
TOTAL HEALTH IN MOTION CONDUCTED IN 2020	9	2,603	896	236	786	0	393	570	1857	1,042	960	191



SPOTLIGHT

Shell Companies in Nigeria (SCiN) also support a range of specialised health initiatives such as “Vision First” a programme with ProSight International Eye Foundation.



Shell in Nigeria briefing notes 2021

STEPHEN AND CELINE AMADI HAVE BENEFITED FROM VISION FIRST.

“If I were to choose just one word to describe my feelings towards the Vision First project, it would be: fulfilment! Although the pre-project planning and approval phases were long and arduous, the project successes and testimonies of the beneficiaries more than compensate for all the difficulties we faced. Together we can improve lives, one eye at a time.”

EFOGHENE ANI
Consultant Ophthalmic Surgeon
ProSight International Eye
Foundation

**IF I WERE TO
CHOOSE JUST
ONE WORD
TO DESCRIBE
MY FEELINGS
TOWARDS THE
VISION FIRST
PROJECT, IT
WOULD BE:
FULFILMENT!**



INVESTING IN EDUCATION

The Shell Petroleum Development Company of Nigeria joint venture (SPDC JV) and the Shell Nigeria Exploration & Production Company (SNEPCo) have offered thousands of Nigerian children, mostly from poor families in the Niger Delta, the opportunity to achieve a quality education for free.

Nigeria faces enormous socio-economic challenges with one in every five of the world's out-of-school children – around 10.5 million. While primary education is free in Nigeria, there are few free secondary schools. Most Nigerians simply cannot afford to educate their children beyond basic learning.

Many parents – aspirational for their children and unable to afford school fees – depend on scholarships from companies and benefactors. Since the 1950s, [the Shell scholarship schemes](#) have



SHELL COMPANIES IN NIGERIA HAVE PROVIDED EDUCATION SUPPORT TO THOUSANDS OF NIGERIAN CHILDREN OVER MANY YEARS. HERE IS A CLASS IN OTUOGIDI COLLEGE OF HEALTH TECHNOLOGY.

supported thousands of students many of whom are among Nigeria's business, political and social leaders.

In 2020, the SPDC JV and SNEPCo invested \$7.7 million in scholarships. Since 2011, the schemes have awarded more than 9,500 secondary school grants and around 6,000 university grants to students. Of these students, more than 1,200 have benefited from the SPDC JV and SNEPCo's Cradle-to-Career (C2C) programme.

Students completing the C2C scheme have access to scholarships at top-quality private schools and then receive support through the University Scholarship scheme. This support is dependent on them securing admission to a Nigerian

university. This may be a small contribution against the overall challenge, but every child that benefits represents a family and a community.

Lack of world-class research institutions and limited access to technology are key challenges in enabling Nigerians to play an even greater role in the oil and gas sector. Shell Companies in Nigeria (SCiN) invest in advancing education through university scholarships, student exchange programmes and focused research. More than 30,000 students applied for around 500 university scholarships in 2020 – the highest number of applicants in the 10-year history of the annual programme.

9,500

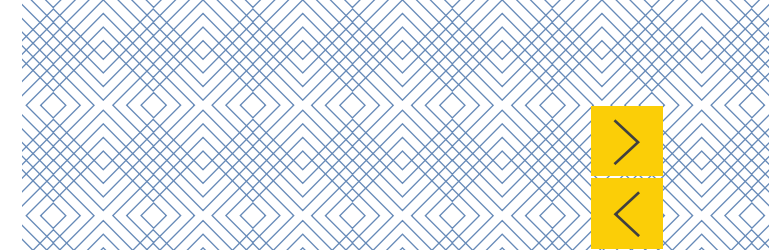
secondary school grants since 2011

6,000

university grants since 2011



CRADLE-TO-CAREER SCHOLARSHIPS COVER THE FULL COST OF TUITION, TRAVEL, ACCOMMODATION, UNIFORMS, BOOKS AND LAPTOPS.



For over 40 years, SCiN have also offered an annual sabbatical programme and research internship for Nigerian academics. In 2020, 31 Nigerians joined the programme – the highest number of participants in its history. The programmes provide Shell with specialised services, while the professors and senior lecturers acquire industry experience and exposure to new technologies that can be introduced into the university curriculum.

The SPDC JV also established the Shell Niger Delta Postgraduate Scholarship programme about 10 years ago which offers one-year scholarships to three UK universities for studies related to the oil and gas industry.

In addition to this, in 2018 the SPDC JV established the Centre of Excellence in Marine Engineering and Offshore Technology at the Rivers State University. In 2020, 10 pioneer students from the centre graduated.



SPOTLIGHT

CRADLE-TO-CAREER SCHOLARSHIPS

The Cradle-to-Career (C2C) scholarship programme pays for children from rural, often poor, communities to attend some of Nigeria's top secondary schools. The SPDC JV has awarded a cumulative 653 C2C scholarships in the Niger Delta since it started in 2010. In 2014, SNEPCo began offering these scholarships to applicants across the country, and so far, 548 students have benefited. In total since 2010, more than 1,200 students have received C2C scholarships.

C2C scholarships cover the full cost of tuition, travel, accommodation, uniforms, books and laptops. Students completing the C2C secondary school scheme also receive support through the University Scholarship scheme. This support is dependent on them securing admission to a Nigerian university.

Shell in Nigeria briefing notes 2021



SPOTLIGHT

SPDC JV UNIVERSITY SCHOLARSHIPS

"My father is a pensioner and a farmer. My mother is a trader. The financial burden for medical studies was too heavy a financial burden for my parents. Then I got the SPDC JV Scholarship. I have been able to buy textbooks I could only dream of having. This experience is something that has forever changed my life and I am proud to be a Shell Scholar."

JOSEPH OGHENEOCHUKO GBOGBO
Medicine and Surgery, University of Maiduguri



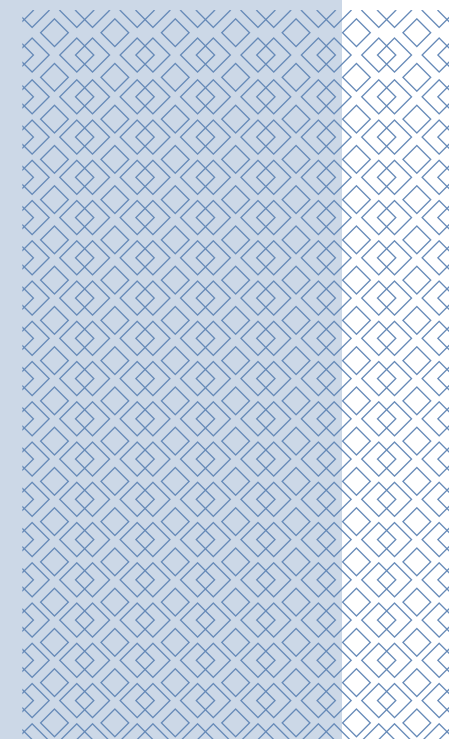
"My parents are civil servants with meagre earnings. I knew I had to work hard to support my family. Getting the SPDC JV scholarship in my first year was a relief to my parents. The financial support helped me sponsor my studies and gave me the confidence to pursue my dreams. I am the current president of the Women in Technology Africa chapter, where we try to breach the gender divide in technology."

AYOBAMI E. OLANREWAJU
MSIT, Carnegie Mellon University,
Africa



Find out more and watch our graduate interviews here:

youtu.be/OfUNrTSIQ8I





SUPPORTING ENTERPRISE AND ENTREPRENEURSHIP

Aspiration, innovation and entrepreneurship are drivers of economic growth and Shell Companies in Nigeria (SCiN) work to improve the chances for Nigerians to achieve their ambitions. SCiN provide access to loans to small and medium businesses which could become suppliers and contractors. Shell has also brought its flagship LiveWIRE youth enterprise development programme to Nigeria.

LiveWIRE was launched in Nigeria in 2003 and provides training and finance to young people between the ages of 18 and 35 to start or expand their own businesses. In 2020, 220 people benefited from the LiveWIRE programme, receiving training in enterprise development and management, as well as business start-up grants. Almost 1,100 Nigerian young people have so far been trained under the programme and more than 1,000 young entrepreneurs were provided with business grants.

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In 2014, the Shell Petroleum Development Company of Nigeria joint venture (SPDC JV) extended LiveWIRE to Ogoniland despite the joint venture no longer producing oil and gas in the area. The aim was to help raise living standards and reduce crude oil theft in the area through the promotion of sustainable alternative livelihoods. This was in line with one of the recommendations of the 2011 United Nations Environment Programme (UNEP) Report for the restoration of the Ogoni environment.

In 2019, the Ogoniland programme gave way to a livelihood programme led and executed by the Hydrocarbon Pollution Remediation Project (HYPREP), an agency established by the federal government and to which the SPDC JV contributes funds. The programme will train 1,200 Ogoni women in various skills.

In 2020, HYPREP completed the training of 400 Ogoni women in a range of agribusinesses, including feed and crop production, poultry and fish farming.



SPOTLIGHT



Every year Shell LiveWIRE supports thousands of individuals to access the knowledge, skills, networks and resources to turn their business ideas into successful enterprises which provide a sustainable income, create jobs and drive innovation. The purpose of LiveWIRE is to improve opportunities for young people to realise their potential through the creation and development of their own businesses. Such businesses will contribute towards a more buoyant economy and communities with more fulfilled young people.



Click on this link to read about some of the entrepreneurs who have benefited from the programme.

ng.livewire.shell/case-studies.html



INTERVIEW

SUCCESS IS MY ONLY OPTION AND IT COMES BY SOLVING PROBLEMS

We speak to **Ogbokuma Ilodeipe**, who helps local farmers process and package their products



Shell in Nigeria briefing notes 2021

Impact

Going through the LiveWIRE Programme, I was able to strategise. I gave my business a name and registered it. The financial support I got from the programme helped me rent premises and increase production so my sales have risen.

Approach

By being exposed to business knowledge and meeting other determined entrepreneurs, I realised that success was my only option and that success comes by finding solutions to problems. During lockdown, I realised that I needed to offer a courier service to my customers and so I used some of the LiveWIRE grant to buy a bike to make deliveries.

Hopes

The impact of my business on the people around me cannot be over emphasised, especially in our pandemic-challenged world. A lot of people in my community are now jobless but I have been able to create 26 jobs and I hope to grow enough to create even more.

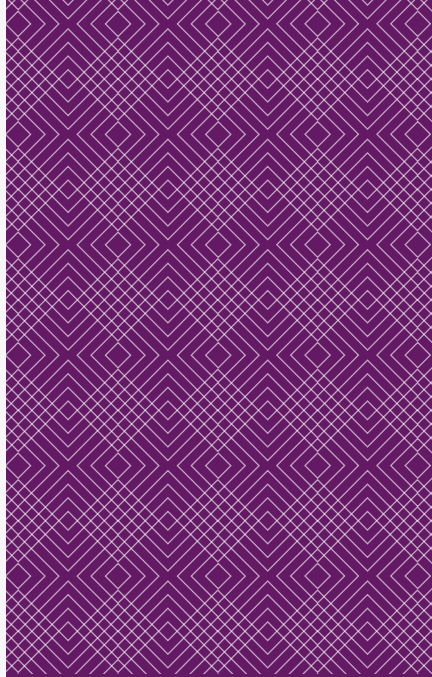
Challenges

Business is doing well but we need to find ways to get more products to more customers and so we must raise funds for more bikes. This will help us expand even further.

THE IMPACT ON PEOPLE AROUND ME CANNOT BE OVER EMPHASISED

OGBOKUMA ILODEIPE
Chief Executive Officer





SPILL PREVENTION

PREVENTING SPILLS IN THE NIGER DELTA



The Niger Delta – a region of forest, farmland, rivers and marshes – is home to around 40 million people and where the Shell Petroleum Development Company of Nigeria Limited (SPDC)¹⁰ operates a network of oil and gas, wells and pipelines on behalf of the SPDC Joint Venture (SPDC JV)¹¹.

¹⁰Unless otherwise stated, all activities reported for or as relating to Shell Petroleum Development Company Limited (SPDC) in this section should be understood as SPDC acting as the operator of the SPDC joint venture (SPDC JV).

¹¹SPDC, as the corporate entity, owns 30% of the JV and is also operator. The other partners are the government-owned Nigerian National Petroleum Corporation NNPC (NNPC, 55% share), Total E&P Nigeria Ltd (10%) and the ENI subsidiary Agip Oil Company Limited (5%).

NO SPILL IS ACCEPTABLE. SPDC JV WORKS HARD TO PREVENT THEM.

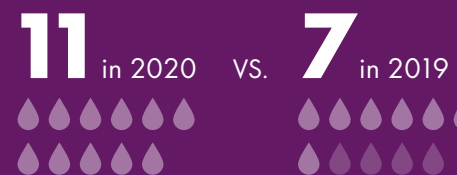


NO SPILL IS ACCEPTABLE AND THE SPDC JV WORKS HARD TO PREVENT THEM

Most often the oil and gas are delivered safely to domestic and international customers without problem thanks to a dedicated focus on operational excellence, spill prevention and, if necessary, responding quickly to any spill. Today, the total spilled volume of crude oil is the lowest for at least 10 years. Spills from the SPDC JV operations, activities and assets are now uncommon and, as operator, SPDC operates to the same technical standards as Shell companies globally. Illegal activities and their legacy continue to require additional work, security and engagement with local communities.



Operational spills fall to



Lowest total spill volume in

10 years

180



Sites remediated in 2019 & 2020

122

Sabotage-related spills in 2020 vs 156 in 2019

The Nigeria Briefing Notes update on activities and programmes undertaken by several Nigerian companies either wholly owned by Shell or in which Shell has an interest. Together, three of these are referred to as the Shell Companies in Nigeria (SCiN).

Shell Petroleum Development Company of Nigeria Limited (SPDC); a wholly-owned Shell subsidiary, which operates an unincorporated joint venture (SPDC JV) in which SPDC holds a 30% interest.

Two other wholly-owned Shell subsidiaries; Shell Nigeria Exploration and Production Company Limited (SNEPCo) and Shell Nigeria Gas Limited (SNG).

The fourth is Nigeria Liquefied Natural Gas (NLNG) Limited; an incorporated joint venture in which Shell B.V. has a 25.6% interest.



PREVENTING ILLEGAL ACTIVITIES

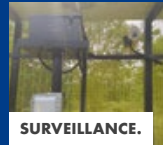
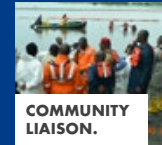
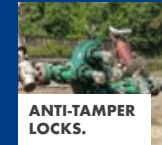
The SPDC JV is committed to minimising the impact of third-party incidents and spills. The joint venture works with government agencies, non-governmental organisations and communities to pro-actively minimise spills from illegal activity. This work includes:

- Using simplified zonal pipeline maps to enhance targeted response to third-party interference and prevent incidents from occurring. Since 2017, SPDC has also been able to remove more than 689 illegal theft points. Illegal theft points are identified by daily inspections from the air and on the ground.

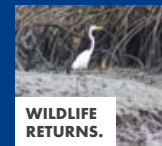
- The joint venture has also implemented anti-theft protection mechanisms, such as anti-tamper locks and steel cages for wellheads. Around 364 cages have been installed so far and around 224 more are planned for 2021/2022 that will all come with CCTV technology. In 2020, 15 breaches of the cages were recorded out of 1,706 attempts. As a result, wellhead-related losses significantly dropped from about 30 kb/d in 2016 to less than 1 kb/d in 2020 across all SPDC operations.
- SPDC has also implemented several initiatives and partnerships to raise awareness of the negative impact of crude oil theft and illegal oil refining. Examples include community-based pipeline surveillance, radio jingles and the promotion of alternative livelihoods through Shell's youth entrepreneurship programme, Shell LiveWIRE.



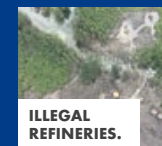
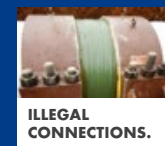
Prevention



Clean up



Causation





UNITED NATIONS REPORT AND THE CLEAN-UP IN Ogoniland

Ogoniland – a region of six kingdoms in the southern Niger Delta – had oil operations for decades and unfortunately has a history of pollution from oil spills, including some, regrettably, from SPDC JV operations. Today, the region is one of the centres of illegal refining and suffers from resulting re-pollution as well as issues from historical spills.

The SPDC JV has produced neither oil nor gas in Ogoniland since 1993 and has transferred operatorship of its assets in Ogoniland to the Nigerian Petroleum Development Company (NPDC). However, the Trans Nigeria Pipeline (TNP), which belongs to the SPDC JV and carries crude oil from various companies, passes through Ogoniland. SPDC, as the operator, responds to any operational incident that may occur on the TNP as well as sabotage and theft incidents on its assets in the region.

Shell in Nigeria briefing notes 2021

In 2011, the United Nations Environmental Programme (UNEP) published a report on Ogoniland and made recommendations to all stakeholders – the SPDC JV, the government and communities. The UNEP report said that the environmental restoration of Ogoniland was possible but that it could take up to 30 years. Ten years into that programme, progress is being made in governance, funding and clean-up activities.

Ogoniland clean-up activities required the federal government of Nigeria to establish an organisation to lead, co-ordinate and assure the various activities. In 2017, the Hydrocarbon Pollution and Remediation Project (HYPREP) agency was created. SPDC representatives offer some advice, alongside other oil and gas representatives, but have no control over this independent organisation.

UNEP recommended that a \$1 billion trust be established to fund the restoration of Ogoniland. The SPDC JV agreed to contribute \$900 million to this fund

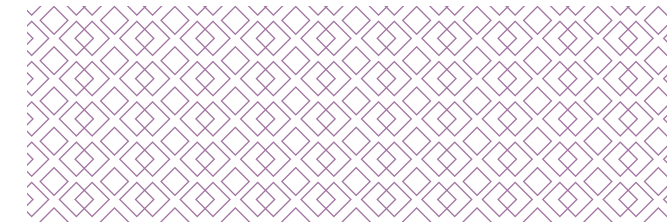


A SHORELINE CLEAN-UP AND ASSESSMENT TECHNIQUE (SCAT) TEAM INSPECT A CREEK.

and has so far made a \$360 million contribution required by the current stage of the programme. Other payments are on track. Funding was not required to be released in 2020 but has been set aside ready for when it is needed by HYPREP.

In 2018, HYPREP awarded contracts for the first set of remediation projects. In 2019, contractors started operations on 21 lots which add up to 12 of the 67 sites originally recorded in the UNEP report. Two of the 67 sites are waste sites without hydrocarbon pollution. In January 2020, HYPREP awarded a further 29 contracts for remediation on 29 lots covering eight polluted sites.

In its report, UNEP made recommendations that were addressed specifically to SPDC as operator of the joint venture. SPDC has acted on all, and completed most, of the UNEP recommendations addressed specifically to it as operator of the joint venture. However, there are recommendations that require multi-stakeholder efforts coordinated by HYPREP.





SPOTLIGHT

SPDC JV ACTIONS ON UNEP RECOMMENDATIONS

Actions on the recommendations addressed specifically to SPDC as operator of the joint venture:

- Reassessed 15 SPDC JV sites mentioned in the UNEP report and remediated further where required with the sites certified by government regulators.
- Completed an inventory and physical verification of assets for decommissioning and working with joint venture partners and the federal government of Nigeria to develop a decommissioning plan for these assets.
- Completed a comprehensive review of its oil spill response and remediation techniques and made a number of improvements in line with industry best practices.
- Collaborated with the Rivers State government to deliver water to impacted communities and built water facilities, which are expected to be upgraded as part of HYPREP's planned activities.
- Trained contractors on clean-up and remediation techniques and assigned specialist supervisors to a number of project sites to ensure effective oversight and compliance.
- Continuing to carry out regular aerial monitoring of the JV's pipelines to identify new incidents or activities (such as theft and sabotage) which may result in environmental damage.
- Providing improved public access to information such as Joint Investigation Visit reports and spill incident data via a spills information [website](#).



For spills reports and incident data visit:

shell.com.ng/sustainability/environment/oil-spills.html





INTERVIEW

BODO CLEAN-UP TECHNIQUES COULD BE REPLICATED ACROSS NIGER DELTA

We speak with **Lesi Maol**, whose indigenous Giolee Global Resources is contracted to the SPDC JV to clean up the creeks.



Shell in Nigeria briefing notes 2021

Impact

Our nine-year relationship has made a positive impact on human capital development, and asset and environmental restoration. The technologies and techniques being used in the Bodo Creek clean-up are yielding results unprecedented in similar projects globally.

Approach

SPDC's approach to project and contract management is sustainable and inclusive. We are also using innovations and hi-tech ideas like modified bio-sparging and multiple injection systems.

Hopes

Without doubt, we see that the technology being used at Bodo creek can be replicated elsewhere in the Niger Delta. Our work helps us to learn how to execute complex projects sustainably.

Challenges

The mud flats with the possibility of sink holes raises serious health and safety issues. This and the impact of COVID-19's 'new normal' requires us to focus on managing the large community workforce.

THE TECHNOLOGIES AND TECHNIQUES ARE YIELDING RESULTS

LESI MAOL
Executive Director



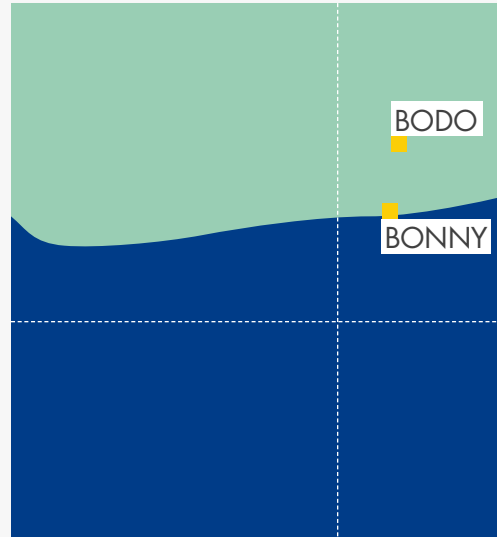


MAKING PROGRESS IN CLEANING UP RECENT SPILLS

The vast majority of spills are caused by sabotage. A small number are linked to regrettable operational issues. Whatever the cause, the Shell Petroleum Development Company of Nigeria Limited (SPDC) acts quickly, as operator, to reduce the volume of crude spilled and to clean up. Cleaned and remediated sites are certified by the government.

Over the past five years the SPDC JV has cleaned up 464 spills sites and the government has certified 390 of these. This challenging work quickly stops the flow of oil, clears surface oil and seeks to remediate soil and waterways. In 2019, the joint venture successfully remediated 130 sites (123 certified), a record year of activity, and planned to extend this into 2020. Unfortunately, working restrictions to prevent the spread of COVID-19 reduced remediation in 2020 to 50 sites (31 certified).

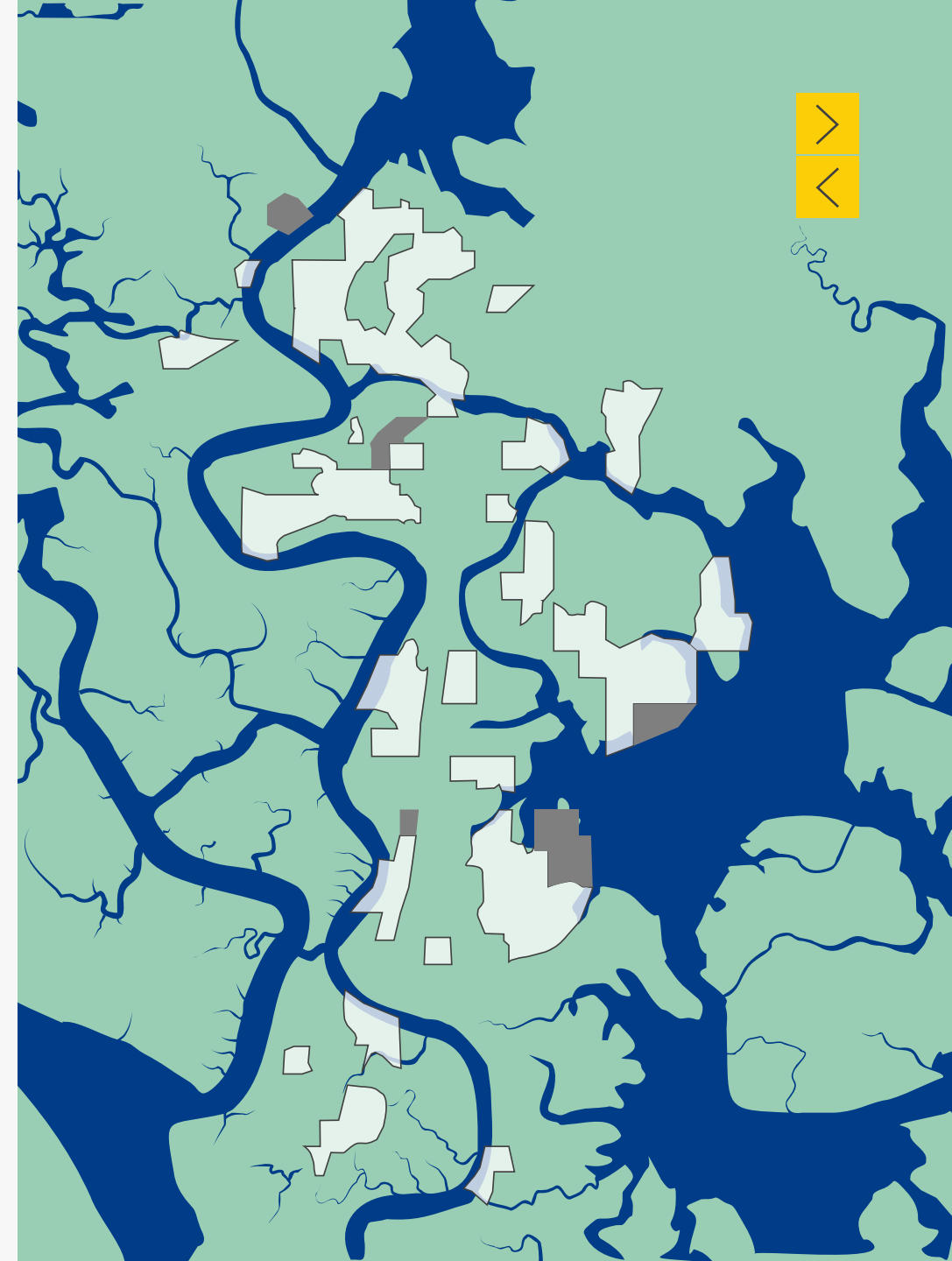
Shell in Nigeria briefing notes 2021



□ Confirmed by SCAT* as meeting the observational requirements for Phase 2

■ Ready for SCAT* review

*Shoreline Clean-up and Assessment Technique





In 2021, the SPDC JV plans accelerated action to catch up, aiming to complete up to four sites per week and remediating over 150 sites in total. This concerted effort has dedicated budget and 300 contractors assigned to the work. Extra soil nutrients and dedicated follow up for certification will help achieve this stretch target. The Nigerian National Oil Spill Detection and Response Agency (NOSDRA) has opened a laboratory in Port Harcourt to help accelerate checks for certification.

SPDC, as operator, also continues to work with the Bodo community in Gokhana, an Ogoniland kingdom, and others to clean up areas affected by two operational spills in 2008. This clean up activity is outside the remit of HYPREP.

CLEAN-UP IN BODO

SPDC continues to work with the Bodo community and others to clean up areas affected by two operational spills in 2008. In 2015, the SPDC JV and the Bodo community signed a Memorandum of Understanding granting SPDC, as operator, access to start cleaning up the affected areas.

The clean-up process is overseen by an independent body called the Bodo Mediation Initiative. Two contractors were selected to conduct the clean-up overseen by an independent project director. The clean-up project initially suffered delays due to difficulties accessing the sites.

The first phase of the clean-up, removal of free phase surface oil, was completed in August 2018, and the contract procurement process for phase two; remediation of soil, was completed in 2019. Remediation activities in the field started in November 2019 and were expected

to end by mid-2021, but the project was shut down for about seven months due to COVID-19 restrictions. Phase two's remediation is now expected to be completed in 2023.

The clean-up consists of three phases: Eight hundred community workers have been medically checked, assessed for their swimming ability to ensure they can safely respond to incidents in rivers and creeks, and trained to International Maritime Organisation oil spill response Levels one and two. The clean-up will only be successful if the repeated recontamination of cleaned-up sites from illegal third-party activity stops.





BODO MEDIATION INITIATIVE



1 Remove surface oil 2015–2018

- MOU granting SPDC, as operator, access to begin the clean-up
- Two contractors selected to perform the clean up
- Shoreline Clean-up Assessment Technique begins (ongoing)
- Sub-surface geological survey completed
- Removal of surface oil completed



2 Remediation 2018–2023

Extended due to Covid-19 restrictions

- Six contractors selected to complete the remediation
- 800 community workers trained to International Marine Organisation oil spill response levels one and two
- Field remediation activities begin (Nov '19)
- Birds, fish and crustations returning to the creeks (tested to identify potential health risks)



3 Planting and monitoring 2021–2028

Likely extended due to Covid-19 lost time

- Planting
- Monitoring by ground surveys
- Monitoring by sensing





INTERVIEW

CLEANING UP BODO

We speak with **Vincent Nwabueze**, the man leading the SPDC JV's Ogoni Restoration Project



Shell in Nigeria briefing notes 2021

Impact

Almost 3,000 young men and women in the Bodo community area will gain meaningful employment by working on cleaning up the sites across the life cycle of the project. This has significantly improved their social standing in the community. With regard to nature, mangroves are recovering, birds are returning and we have fish in the creeks. In the markets of Bodo, all kinds of fish, periwinkles and crabs are on sale. The environment is recovering.

Approach

Our local contractors use internationally recognised remediation techniques, which are good for the environment to ensure the clean-up is sustainable. We work hard to get buy-in from all stakeholders. We are constantly liaising with government security forces and regulatory agencies to help prevent illegal activities.

THE ENVIRONMENT IS RECOVERING AS REMEDIATION WORK PROGRESSES

VINCENT NWABUEZE

Ogoni Restoration
Project Manager

Hopes

I want to be able to say that we have successfully cleaned the creek and returned it to a state where it will benefit generations to come.

Challenges

Illegal activities are still happening. These actions are polluting the environment. The Niger Delta is a network of waterways. What happens in one area of the water will end up in another area. If the illegal activities don't stop we are risking the Bodo clean-up being an action in futility. Security is a big challenge.





SPOTLIGHT

USING BACTERIA TO CLEAN UP OIL SPILLS

The Shell Petroleum Development Company of Nigeria joint venture (SPDC JV) uses techniques to clean up oil that are believed to be the best for the soil and climate conditions of the hot and humid Niger Delta.

One such technique is bioremediation, which puts live bacteria to work to remove contaminants, pollutants and toxins from the soil and water.

These organisms 'eat' the carbon-rich oil spills, using it for energy and, ultimately, leading to its removal. However, the bacteria used in this bioremediation process need oxygen to survive. This makes it hard for them to work in layers of mud or under water.

To get around this problem, the SPDC JV uses a technique known as bio-sparging to help the bacteria survive where there is not enough natural oxygen. Bio-sparging sends the bacteria into the deeper layers with their own supply of compressed air and water, giving them a direct supply of oxygen for their work. This process is done without disrupting the surrounding soil or water.

Bioremediation has wider positive impacts, for example in developing local expertise in these specialist techniques.

The SPDC JV uses bioremediation along with other technologies where appropriate. All the SPDC JV's remediation practices are aimed to be compliant with the Environmental Guidelines and Standards for the Petroleum Industry in Nigeria (EGASPIN).



A TEAM OF WORKERS CLEANING A CREEK.



TODAY OPERATIONAL SPILLS ARE UNCOMMON

There were 11 operational spills over 100 kilograms in 2020 compared with over 60 in 2011 and the SPDC JV has reduced the average volume of spilled oil in each incident by nearly 80% in the last decade. In 2020, the SPDC JV had four more operational spills than 2019, but the spill volumes were lower year-on-year.

Over the past 10 years, the total number and volume of oil spills from operations in the Niger Delta have been significantly reduced. Operational spills have been significantly fewer since 2016 and the Shell Petroleum Development Company of Nigeria Limited (SPDC) believes it is possible to have zero spills, but there are still occasions when accidental spills occur.

The SPDC JV apologises for these spills and recognises there is still work to do to end operational spills completely. SPDC believes this is possible if it can continue to improve its performance in the areas where it has control. To reduce the number of operational spills in Nigeria, the SPDC JV is focused on implementing its ongoing work programme to appraise, maintain and replace key sections of pipelines and flow lines.

SPDC has completed more than 1,330 kilometres of new pipelines over the last 10 years. This is organised through a pipeline and flow line integrity management system that pro-actively addresses pipeline integrity. It puts barriers in place where necessary and recommends when and where pipeline sections should be replaced to prevent failures. In 2018, this integrity management system was enhanced to manage threats arising from frequent pipeline sabotage or vandalism.



Up to date information such as Joint Investigation Visit reports and spill incident data can be viewed at:

<https://www.shell.com.ng/sustainability/environment/oil-spills.html>

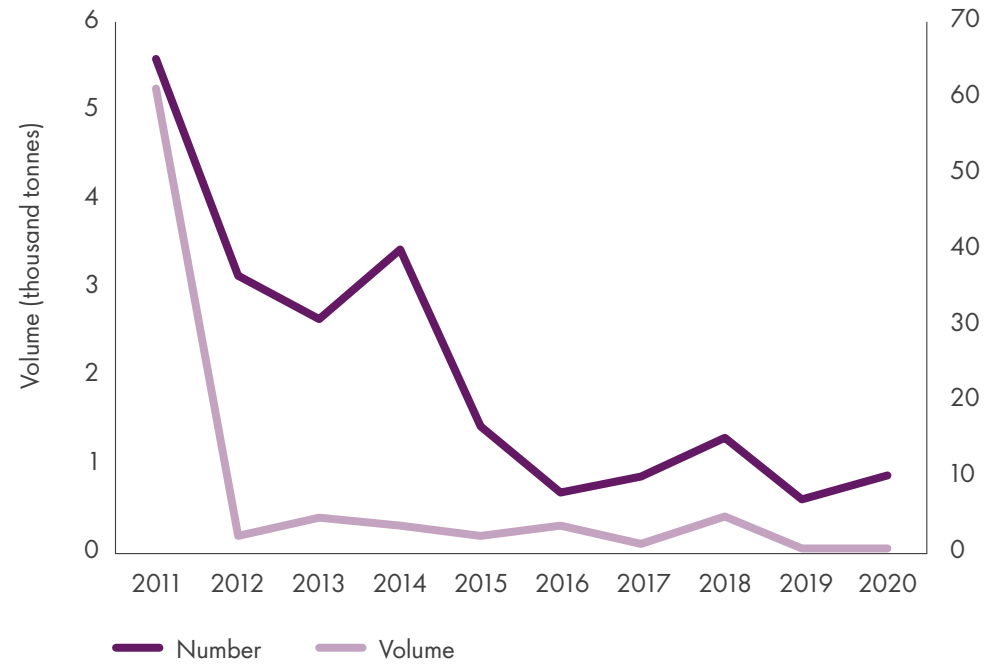


SPDC JV REMEDIATION AND OIL SPILL RESPONSE TEAM ARE ALWAYS READY TO RESPOND.

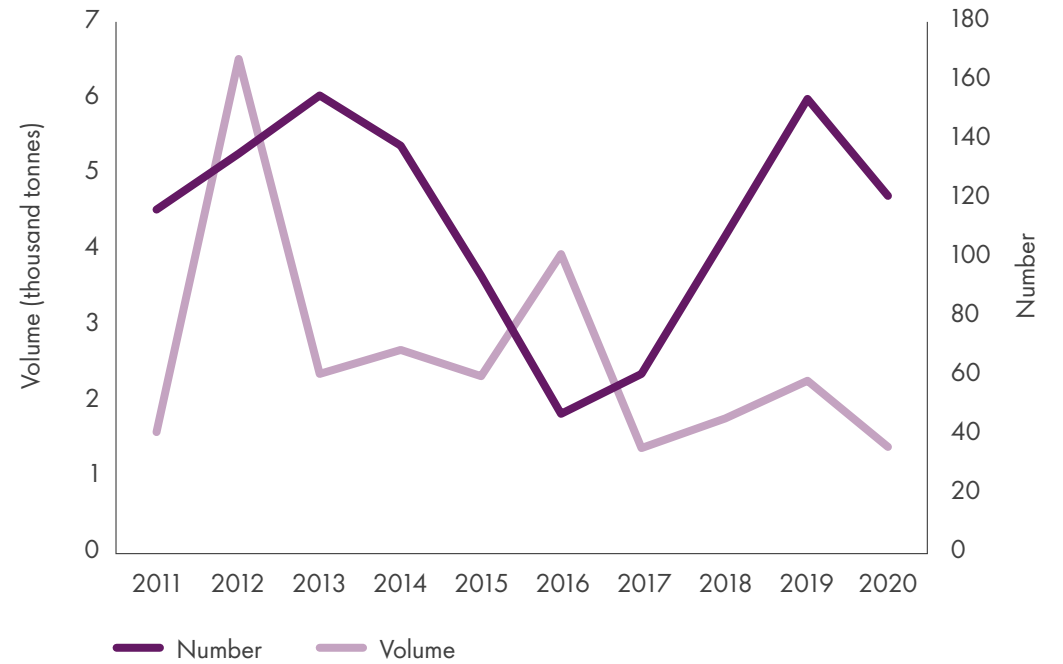


SPDC JV SPILLS

Operational spills



Sabotage spills





INTERVIEW

PIPELINES ARE OUR LIFEBLOOD

We speak to **Christopher Griffiths**, the man who keeps the pipelines flowing for SPDC.



Shell in Nigeria briefing notes 2021

Impact

The lifeblood of the SPDC JV is the pipeline. Over the last 10 years we have demonstrated a significant reduction in time to repair leaks. Availability of our main pipelines has been 100% in the last two years. Against the backdrop of a challenging environment, this delivers a positive message.

Approach

The team have a forward-looking plan from which they can deliver. They can mitigate key threats, make choices and prioritise the work. So, for 2021, I know exactly what we need to do. This level of granularity means we can maintain our lines far better than we have done in the past.

Hopes

Maintaining the availability of pipelines through routine maintenance and inspection is a priority. With our new corrosion management framework we can forecast corrosion rates and ensure the maintenance activity happens before a pipeline fails.

Challenges

We meet a wide range of community views and needs. It is not as simple as turning up to maintain our pipeline. Community support and trust is essential. The security of my team is crucial. I only sleep at night knowing that they are out there trying to do the right thing and are adequately supported.

YOU HAVE TO ENGAGE THE TRUST OF THE COMMUNITY

CHRISTOPHER GRIFFITHS
SPDC Pipelines Manager





FASTER RESPONSE, FASTER CLEAN-UP

The Shell Petroleum Development Company of Nigeria joint venture (SPDC JV) is committed to cleaning up all oil spills related to its assets and infrastructure, regardless of the cause. The Shell Petroleum Development Company of Nigeria Limited (SPDC), as operator, is having success in responding faster and cleaning-up faster but needs support from government agencies to prevent re-pollution caused by sabotage and illegal refining.

Today, SPDC’s operational response and repair is prompt and spill volumes are reduced on average by nearly 80% in the last decade.

The SPDC JV’s average time to complete the recovery of surface oil has more than halved from 13 days in 2016 to five days in 2020. Closer engagement with communities has helped SPDC to access spill locations more quickly, meaning on average that joint investigations into the cause of a spill now commence within two days in 2020 compared to six days in 2016.

Today, SPDC’s frontline spill response teams are able to respond faster than ever to spills and they have significantly reduced cleaning up times. This has been achieved by improving our practices and by forging partnerships with local communities and contractors in the region. These relationships have helped the SPDC JV respond faster to spill incidents, some of which occur in hard-to-reach areas where security is at risk and the support of communities is necessary.



Up to date information such as Joint Investigation Visit reports and spill incident data can be viewed at:

<https://www.shell.com.ng/sustainability/environment/oil-spills.html>

When a leak is identified, production is suspended, and efforts made to contain any spilled oil. The SPDC JV regularly tests its emergency spill response procedures and capability to ensure staff and contractors can respond rapidly to an incident.

In line with government regulations, a Joint Investigation Visit (JIV) team visits the spill site to establish the cause and volume of oil spilled. The team comprises representatives from the SPDC JV, regulators, government security agencies, state governments and communities.



SPDC JV HAVE MORE THAN HALVED THE AVERAGE TIME TO COMPLETE RECOVERY OF SURFACE OIL.

Once the clean-up and remediation is completed, the work is inspected and, if satisfactory, approved and certified by Nigerian government regulators.



INTERVIEW

CLOSE COLLABORATION WITH THE IUCN IN THE NIGER DELTA

We speak to **Rachel Asante**, expert in biodiversity from the International Union for the Conservation of Nature (IUCN)



RACHEL ASANTE (RIGHT) IN THE FIELD WITH SPDC JV'S CHINYERE OZUMBA.

Shell in Nigeria briefing notes 2021

Impact

A conservation organisation and an oil company are not natural bedfellows. But we have worked together to find some technical solutions to a difficult issue. We're instituting an advisory group, which is made up of both Nigerian and international scientists, and which is working with SPDC to ensure that remediation standards are best practice.

Approach

The SPDC JV approached the IUCN about getting some support in areas of remediation and biodiversity recovery. It's been a fruitful collaboration and we have managed to build trust. We have learned from SPDC colleagues and they have learned from us. We've managed to come to a common understanding which is critical.

Hopes

We are monitoring the spill sites but we're also monitoring reference sites so that we can establish an environmental baseline.

IT CAN BE PART OF A LARGER SOLUTION

RACHEL ASANTE

Union for the Conservation of Nature

This project can contribute to what needs to be done in the Niger Delta. It's not a panacea that will solve all the problems of oil spills in the Niger Delta, but I hope it can be part of a larger solution.

Challenges

Every project has been impacted by COVID-19. We've had to put the brakes on a little in getting into the field and implementing the assessments that we want to do. Accessibility is also a challenge. Some of those spill sites are not accessible or are in places where there are security concerns.





COUNTERING SPILLS CAUSED BY SABOTAGE

The vast majority of oil spills in the Niger Delta continue to be caused by crude oil theft or the sabotage of pipelines, as well as illegal oil refining. While the Shell Petroleum Development Company of Nigeria joint venture (SPDC JV) has no authority to prevent illegal oil refineries, it is committed to preventing attacks and breaches of its pipelines and well heads. In 2020, 92% of oil spills were caused by sabotage and theft – similar to previous years.

The challenge of preventing spills relating to sabotage and theft by third parties remains. In 2020, there were 122 sabotage-related spills over 100 kilograms, down from 156 in 2019. Thanks to preventive efforts, spilled volumes from illegal activities were around 1,400 tonnes of crude in 2020, compared with over 2,300 tonnes in 2019 and over 4,000 tonnes five year ago.

Sabotage incidents often occur in remote areas of the Niger Delta where access is difficult. The SPDC JV works closely with government agencies, non-governmental organisations and communities to pro-actively minimise spills from illegal activity. This involves using simplified zonal pipeline maps to enhance targeted response and prevent incidents from occurring.

The use of new surveillance equipment, regular overflights, on-the-ground inspections and anti-theft protection mechanisms all also contribute to discouraging crude oil theft.

Since 2016, the Shell Petroleum Development Company of Nigeria Limited (SPDC), as operator, has also been able to remove more than 720 illegal theft points. Illegal theft points are identified by regular inspections from the air and on the ground. SPDC has also implemented

anti-theft protection mechanisms, such as anti-tamper locks and steel cages for wellheads. By the end of 2020, 364 cages have been installed including 73 cages upgraded with CCTV. Around 224 more are planned the next two years.

In 2020, 15 breaches of the cages were recorded out of 1,706 attempts. As a result, well head-related losses significantly dropped from about 30 kb/d in 2016 to less than 1 kb/d in 2020 across all SPDC JV operations.

All societies have criminals motivated by self-interest but poverty and the inability to access alternative livelihoods contributes to third-party incidents. Shell Companies in Nigeria (SCiN) and their joint venture partners have made voluntary social investments of between \$40 million and \$50 million annually over the last five years to help improve the lives of millions of Nigerians. A large portion of this social investment is made in the Niger Delta through programmes which are driven by local communities.





INTERVIEW

AT THE FRONTLINE OF THE NIGER DELTA

We speak to **Chima Nicholas Agomuo**, a frontline spills responder



Shell in Nigeria briefing notes 2021

Impact

I get the most pride and satisfaction when I see that the leak has stopped and the leak site is clean. Then some time later, I'll return and see that the restoration process is ongoing, that I've been able to take care of that.

Approach

We work to stop the free flow of the spill and reduce it as much as possible to reduce the impact on the environment. We work as a team and this makes it so much easier and faster to do what we do.

Hopes

We work as a team to protect the environment. If we protect it, we make it safe for generations to come, to enjoy it and to live comfortably on it.

Challenges

The response team is the first line of response activity. It is a collective effort, not a sole responsibility. You have team members that are there any time you call them to support the response activity.

WE WORK AS A TEAM

CHIMA NICHOLAS AGOMUO
Spills Responder





RECOGNITION AND AWARDS

Shell Companies in Nigeria have received numerous awards in recognition of their contribution to the country's social and economic development. Among these are:

2020

Dr. Chikwe Ihekweazu, Director General at The Nigeria Centre for Disease Control (NCDC)'s commended SCiN for their critical support to the country's response activities to COVID-19, as they did during the 2014 Ebola outbreak.

"The support from Shell Companies in Nigeria came at a crucial time. It enabled NCDC to access medical and laboratory supplies and accelerated creation of testing capacity for COVID-19. We look forward to developing our collaboration further, for outbreak preparedness and response."

2019

Jobberman report names Shell Companies in Nigeria the "**Best Company to Work For**". Shell led the pack of top 100 companies that respondents admire, respect and desire to work for the most.

Petroleum Technology Association of Nigeria (PETAN) awards Shell Companies in Nigeria "**Local Content Operator of the Year**" at the 2019 Annual Oil Industry Achievement Awards.

SPDC won the 2019 Nigeria Oil and Gas Conference (NOG) **Excellence Award** presented to a member of the Nigerian Oil and Gas value chain with the most positive commercial or technical contribution to the industry.

2018

Sustainability Enterprise and Responsibility Awards (SERAs): Shell Companies in Nigeria awarded "**Best in Climate Action**" for the Afam VI Power Plant.

SNEPCo was named the "**Best Nigerian Oil and Gas Company in Technology and Innovation**" at the Nigerian International Petroleum Summit (NIPS). SNEPCo won the award for pioneering in-country subsea tree refurbishment. This was the first time in the Nigerian oil and gas industry that a subsea tree was fully stripped down and refurbished locally with its original functionality restored.

Petroleum Technology Association of Nigeria (PETAN) names SPDC "**Local Content Operator of the Year**", marking the third time Shell Companies in Nigeria have won the PETAN award.

Shell Companies in Nigeria were also awarded the "**Best Performing International Company in Technology and Innovation**" at the first Nigeria International Petroleum Summit, which included recognition of their role in local capacity development and Nigerian content.





OUR PERFORMANCE DATA

	2020	2019	2018	2017	2016	2015	2014	2013	2012	2011
FLARING OF ASSOCIATED FROM SPDC JV AND SNEPCO OPERATIONS										
FLARING (UPSTREAM) (MILLION TONNES HYDROCARBON FLARED)										
NIGERIA [A] [F]	0.6	0.7	0.6	0.8	0.5	0.9	1.2	1.2	1.5	2.0
OIL SPILLS AND DISCHARGES FROM SPDC JV AND SNEPCO OPERATIONS [B] [C] [D]										
SABOTAGE SPILLS - VOLUME (THOUSAND TONNES)	1.4	2.3	1.8	1.4	4.0	2.3	2.7	2.4	6.6	1.6
SABOTAGE SPILLS - NUMBER [F]	122	156	109	62	48	94	139	157	138	118
OPERATIONAL SPILLS - VOLUME (THOUSAND TONNES) [D] [F]	0.02	0.03	0.4	0.1	0.3	0.2	0.3	0.4	0.2	5.2
OPERATIONAL SPILLS - NUMBER [E] [F]	11	7	15	10	8	17	40	31	37	65

A Nigeria includes SPDC onshore operations (0.5 million tonnes flared in 2020) and SNEPCo offshore operations (0.1 million tonnes flared in 2020).

B All spill volumes and numbers are for spills of more than 100 kilograms.

C **As of the end of March 2021, there were three spills under investigation in Nigeria that may result in adjustments.**

D Nigeria includes SPDC onshore operations and SNEPCo offshore operations. A single spill at the Bonga field offshore Nigeria amounted to 4.8 thousand tonnes in 2011.

E Nigeria includes SPDC onshore operations (11 operational spills in 2020) and SNEPCo offshore operations (0 operational spills in 2020).

F We have updated some of our historical figures following review of the data.



CAUTIONARY NOTE

The companies in which Royal Dutch Shell plc directly and indirectly owns investments are separate legal entities. In this Briefing Notes “Shell”, “Shell Group” and “Group” are sometimes used for convenience where references are made to Royal Dutch Shell plc and its subsidiaries in general. These terms are also used where no useful purpose is served by identifying the particular entity or entities. “Subsidiaries”, “Shell subsidiaries” and “Shell companies” as used in this Briefing Notes refer to entities over which Royal Dutch Shell plc either directly or indirectly has control. Entities and unincorporated arrangements over which Shell has joint control are generally referred to as “joint ventures” and “joint operations”, respectively. Entities over which Shell has significant influence but neither control nor joint control are

referred to as “associates”. The term “Shell interest” is used for convenience to indicate the direct and/or indirect ownership interest held by Shell in an entity or unincorporated joint arrangement, after exclusion of all third-party interest.

In this Briefing Notes “Shell Companies in Nigeria” and “SCiN” are used to refer to Shell Petroleum Development Company of Nigeria Limited (SPDC), Shell Nigeria Exploration and Production Company Limited (SNEPCo), and Shell Nigeria Gas Limited (SNG) collectively for convenience where references are made to Shell entities operating in Nigeria. Likewise, the words “we”, “us” and “our” are also used to refer to “Shell Companies in Nigeria” or “SCiN” in general or to those who work for them. These terms are also used where no useful purpose is served by identifying the particular entity or entities.

As used in this Briefing Notes, “Accountable” is intended to mean: required or expected to justify actions or decisions. The Accountable person does not necessarily implement the action or decision (implementation is usually carried out by the person who is Responsible) but must organise the implementation and verify that the action has been carried out as required. This includes obtaining requisite assurance from Shell companies that the framework is operating effectively. “Responsible” is intended to mean: required or expected to implement actions or decisions. Each Shell company and Shell operated venture is responsible for its operational performance and compliance with the Shell General Business Principles, Code of Conduct, Statement on Risk Management and Risk Manual, and Standards and Manuals. This includes responsibility for the operationalisation and implementation of Shell Group strategies and policies.

This Briefing Notes contain forward-looking statements (within the meaning of the U.S. Private Securities Litigation Reform Act of 1995) concerning the financial condition, results of operations and businesses of 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 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 “aim”, “ambition”, “anticipate”, “believe”, “could”, “estimate”, “expect”, “goals”, “intend”, “may”, “objectives”, “outlook”, “plan”, “probably”, “project”, “risks”, “schedule”, “seek”, “should”, “target”, “will” and similar terms and phrases. There are a number of factors that could affect the future operations of Shell and could cause those results to differ materially from those expressed in the forward-looking statements included in this Briefing Notes, 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; (m) risks associated with the impact of pandemics, such as the COVID-19 (coronavirus) outbreak; and (n) changes in trading conditions. No assurance is provided that future dividend payments will match or exceed previous dividend payments. All forward-looking statements contained in this Briefing Notes 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 plc’s Form 20-F for the year ended December 31, 2020 (available at www.shell.com/investor and www.sec.gov). These risk factors also expressly qualify all forward-looking statements contained in this Briefing Notes and should be considered by the reader. Each forward-looking statement speaks only as of the date of this Briefing Notes, 15 April 2021. 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 Briefing Notes.

The content of websites referred to in this Briefing Notes do not form part of this Briefing Notes.

We may have used certain terms, such as resources, in this Briefing Notes that the United States Securities and Exchange Commission (SEC) strictly prohibits us from including in our filings with the SEC. 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.



