## **Upstream Oil and Gas Operations in sub-Saharan Africa**



Operational Excellence in Exploration, Production, Sales and Marketing

LOCOSED

PERICP

Focus on: The Manager Special St Spotlight Programme M



### **Course Overview**

The upstream oil and gas industry in Arrica is dynamic, capital-intensive, and increasingly complex. Across West Africa (Nigeria, Ghana, Côte d'Ivoire), Central Africa (Angola, Cameroon, Chad, Congo-Brazzaville), East Africa (Kenya, South Sudan, Tanzania, Uganda) and Southern Africa (Namibia, Mozambique, South Africa), companies face challenges of deepwater exploration, frontier gas monetization, pipeline security, fiscal reforms, and price volatility.

This training course equips participants with the skills to:

Navigate Nigeria's Petroleum Industry Act (PIA), Angola's PSC frameworks, and Ghana's royalty/tax regime. Analyze the economics of deepwater oil (Akpo, Jubilee, Girassol) and LNG projects (NLNG, Angola LNG, Mozambique LNG, Coral FLNG).

Address operational risks including pipeline sabotage, illegal bunkering, and community relations in the Niger Delta, as well as security in the Gulf of Guinea.

Evaluate frontier plays like Namibia's Orange Basin discoveries and their global implications.

	Course Objectives		This Course is Ideal For:
1	Gain a regional perspective of upstream oil business in Africa.	<b>√</b>	Business Development Managers
2	Understand technological advances applied in African offshore deepwater and frontier basins.	<b>√</b>	Corporate Planning Professionals
3	Evaluate fiscal regimes in Nigeria, Ghana, Angola, Mozambique, and South Africa.	✓	Geoscientists & Engineers (exploration, drilling, reservoir)
4	Discuss upstream contracts with clarity, confidence, and regional insight.	<b>√</b>	Refinery & LNG professionals (NLNG, Sasol GTL, Angola LNG)
5	Apply petroleum economics, project evaluation, and risk analysis to African case studies.	<b>√</b>	Government Regulators (DPR/NUIMS in Nigeria, GNPC in Ghana, Sonangol in Angola, ENH in Mozambique)
6	Strengthened understanding of African upstream economics and fiscal risks.	✓	Tax & Finance Advisors in upstream oil & gas
7	Improved ability to negotiate contracts with host governments and NOCs.	✓	Legal, JV, and Contracting Professionals
8	Broader technical knowledge of deepwater operations, LNG, and frontier gas.	<b>√</b>	Equity Analysts and Energy Bankers

Page 1 of 3

# Upstream Oil and Gas Operations in sub-Saharan Africa



Operational Excellence in Exploration, Production, Sales and Marketing

		Course Content		
	Day	Theme	Coverage	
	1	African Upstream Industry Overview FOCUSSED	<ul> <li>Introduction to African oil &amp; gas industry</li> <li>Petroleum geology of West African Transform Margin (WATM),         Niger Delta, and Angola's deepwater</li> <li>Exploration &amp; drilling case studies: Jubilee (Ghana), Akpo (Nigeria),         Girassol (Angola), Graff (Namibia)</li> <li>Future trends: Mozambique/Tanzania LNG frontier, Orange Basin         oil play</li> </ul>	
	2	Success Factors in African Upstream	<ul> <li>Advances in offshore drilling, subsea systems, and FLNG in Africa</li> <li>Well evaluation and completions in deepwater West Africa</li> <li>Surface facilities: FPSOs in Nigeria, Angola &amp; Ghana</li> <li>Pipeline challenges: Niger Delta sabotage, Chad–Cameroon pipeline security</li> <li>Maintenance and EOR in mature basins (Nigeria, Gabon, Congo)</li> <li>Reserves reporting and African regulatory differences</li> </ul>	
F	3 SE OCI	SSED FOCUSSED	<ul> <li>Reservoir management in declining basins (Nigeria, Gabon)</li> <li>Linkage of upstream to refining (Dangote Refinery, Sasol GTL, Sonangol Luanda)</li> <li>Legal frameworks: Nigeria's PIA, Angola's PSC reforms, Ghana's Petroleum Act</li> <li>Project economics: case examples from NLNG Train 7 and Mozambique LNG</li> <li>Oil price risk management in African producers (hedging, fiscal buffers)</li> </ul>	
	4	Contracts & Fiscal Systems in Africa	<ul> <li>Relationships between IOCs and African NOCs (NNPC, GNPC, Sonangol, ENH)</li> <li>Understanding petroleum fiscal systems: royalty/tax vs PSC vs hybrid</li> <li>Fiscal systems in Nigeria, Ghana, Angola, Mozambique, South Africa</li> <li>Comparison with global peers (Middle East, North America)</li> <li>LNG project fiscal options (e.g., Angola LNG, Mozambique LNG, Cameroon FLNG)</li> </ul>	

# **Upstream Oil and Gas Operations in sub-Saharan Africa**



Operational Excellence in Exploration, Production, Sales and Marketing

Focus on: The Manager lacktriangle The Specialist lacktriangle Spotlight Programme lacktriangle Hands-on Skills lacktriangle

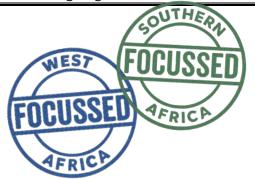
5	Petroleum Economics & Risk	Regional petroleum dynamics: OPEC Africa (Nigeria, Angola) and
	Analysis	frontier Africa (Mozambique, Namibia)
		<ul> <li>Profitability indicators and fiscal benchmarks in Africa</li> </ul>
		<ul> <li>Risk and uncertainty in upstream African projects (price, security,</li> </ul>
		political)
		<ul> <li>Evaluating projects by risk-based economics (Mozambique LNG,</li> </ul>
		Namibia deepwater)
		Group exercise: Investment decision-making for an African
		upstream project

Course Assessment	Certification
Participants will be assessed on:	Upon successful completion of the course,
Participation in sessions	participants will receive a Certificate of Successful
Completion of exercises & case studies	Completion, along with a Transcript of Marks
Performance in assessments	showing the performance by grade in each element
	of assessment and overall.

## **Course Instructor**

With BSc and PhD degrees from the UK, and with over 30 years of refinery technology, operations, and management expertise for several famous-name oil companies, this speaker is now an internationally-famous chemical engineering consultant.

As a Chartered Chemist, a Member of the Royal Society of Chemistry and a Member of the American Institute of Chemical Engineers, he holds honorary appointments at a number of European universities and conducts cutting-edge research into vacuum distillation, gas recovery, absorption and pyrolysis



www.ntuitiv.co.uk



