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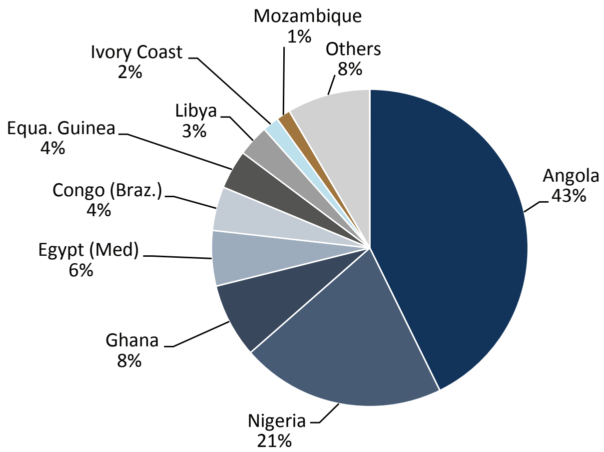
THE ENERGY ANALYSTS

Offshore Africa Oil & Gas Market Report to 2017

Infield Systems has just released the latest edition of its Offshore Africa Oil and Gas Market Report To 2017. This latest report provides a detailed forecast, including oil and gas capital expenditure projections and number of installations, for each of the main sectors in the offshore oil and gas industry, including: fixed platforms, floating platforms, subsea production units, pipelines and control lines; whilst also providing an overview of the demand and supply for vessels in the African region. In this latest edition, an in-depth review of the region's deepwater potential is also provided.

High oil prices have driven new interest in sub-Saharan Africa's under-explored basins in recent years, with new exploration uncovering a number of plays that have the potential to substantially boost regional production and exports. With geological similarities to the sedimentary basins offshore Brazil, increasing exploration attention is also going to be paid to the potential of West African pre-salt prospects. Explorations continue offshore and onshore Angola, Namibia, Gabon and Congo (Brazzaville).

The African market remains dominated by Angola, and to a lesser and decreasing extent by Nigeria. Throughout the period from 2008-2012, some of the most capital intensive developments globally took place in these waters, with the most notable projects including BP's PSVM and Total's Pazflor offshore Angola, and Total's Akpo and Usan developments in Nigeria. Recent years have also witnessed the expansion of development across the region, with Ghana's giant Jubilee development recognised as one of the five most capital intensive projects across the region during the timeframe.



Africa Capex (%) by Country 2013-2017

Source: Infield Systems' Africa Oil & Gas Market Report to 2017

Over the period to 2017, Angola's offshore development is expected to remain robust. Widely acknowledged as a more stable business environment than Nigeria, operator confidence in Angola's offshore development is expected to continue to strengthen, with some of the most capital intensive developments expected to take place in the final years of the current forecast, including Chevron's giant Lucapa project, Total's Kaombo and BP's Palas (PAJ).

In contrast, Nigeria's share of Capex over the next five years is expected to decrease compared to the 2008-2012 timeframe; with operator uncertainty surrounding the Petroleum Industry Bill (PIB) being a key factor behind a lot of investment plans being put on hold. However, with a number of IOCs remaining committed to development within Nigeria's waters, significant capital expenditure remains likely, including Shell's Bonga Southwest and Bonga North, in addition to Total's giant Egina project.

Whilst the PIB is indeed a significant issue regarding the uncertainty surrounding future Nigerian development, the expected reduction of Nigeria's overall Capex market share also results from the higher growth levels of a number of smaller West African producers. The growth of Ghana's hydrocarbon industry over recent years is perhaps most notable, with projects over the forthcoming five year period including the Tullow-operated TEN field developments of Tweneboa, Enyenra and Ntomme. Going forwards, in addition to the TEN fields, Infield Systems also expects capital expenditure to be required on a further 19 field developments.

Infield Systems also expects substantial Capex to be directed towards offshore Equatorial Guinea over the next five years, with a total of 27 fields expected to require Capex during this timeframe compared to just 12 fields during the historical period. Operators Noble and ExxonMobil are expected to lead the market going forwards.

In operator terms, French giant Total is expected to continue to dominate the African market. The Kaombo I and Kaombo II field developments are expected to lead demand offshore Angola going forwards, whilst offshore Nigeria the giant Egina is anticipated to require 72% of the operator's expected Capex spend within the country's waters. Altogether, the operator is expected to form a 19% share of the African market going forwards to 2017, with the pipeline market sector expected to comprise the largest proportion of the French Super Major's spend during this timeframe.

Chevron's market share is expected to witness some of the largest growth in offshore spend compared with the period 2008 to 2012, with the largest drivers of the US IOC's demand expected to relate to activities offshore Angola; on the Lucapa field specifically, whilst the Mafumeira development will also require significant spend by the operator. Offshore Nigeria, Chevron's key projects over the period are likely to include Nsiko and Okan area associated gas recovery, whilst further expenditure is also expected offshore Congo (Brazzaville).

From a market sector perspective, the largest share of Capex spend within the African region is expected to be attributable to the pipeline market. Developments which are expected to command significant pipeline spend going forwards to 2017 include the Okan area fields, Nigeria, specifically the Olokola LNG Project, where Capex is expected during the years 2016 and 2017. Subsea market share is expected to become the second largest market sector in terms of operator spend within the region over the forecast, although the actual percentage share of the subsea market compared to the previous five year period is expected to decline by 9% of total Capex.

Over the forecast, the platform sector is expected to witness the largest proportionate growth in Capex. A key project driving this increase in spend is Total's Egina development, where an FPSO is expected to come on-stream at the very end of the forecast, in 2017/18.

Report Contents

- **Executive Summary** provides an overview of the African offshore oil and gas market highlighting the main points of the report and identifying the most crucial trends affecting the market.
- **Global Market Overview** provides an overview of current economic conditions in both developed and emerging markets, oil price trends and field sanction points, offshore production and reserves, as well as key industry trends, including the impact of unconventionals and the growth of LNG on the global market.
- **Sector Analysis and Forecasts**:

– **Fixed Platforms** provides an overview of the fixed platform market followed by a detailed discussion of key operators and developments. In-depth analysis of fixed platforms by country, by type (Piled, Jack-up, CPT, Conductor Supported, Caisson), by water depth and by weight band is also provided.

– **Floating Production Systems** contains a market overview as well as a detailed forecast for the FPS market, including Capex and number of installations by operator, by country, by type (TLP, Semi-Submersible, FSO, FPSO, Other Floaters), by water depth and by build. Key developments are also discussed.

– **Subsea** includes a sector overview as well as a detailed forecast for the Subsea market, including Capex and number of installations by operator, by country, by sector (Equipment, Drilling & Completion) and development type (Subsea Tree, Subsea Separation, Manifold, Booster Pump), and by water depth. Key developments are also discussed.

– **Pipelines and Control Lines** provides an overview of the sector and the key operators and developments. Further detailed analysis is then provided about pipelines by country, by market segment (Trunk/Export Lines, SURF, Conventional), by water depth, by material and by diameter, whilst control lines are reviewed by country and by type.

– **Deep and Ultra-Deepwater** looks at the outlook for deepwater development in the region, including Capex projections by operator, by country and by sector (Platforms, Subsea, Pipelines and Control Lines). Key deepwater developments are also discussed.

– **Specialist Vessels** provides in-depth forecasts for regional vessel demand (vessel days) and supply (units), including contract awards, for the major markets - Pipelay, Heavy Lift, Multifunctional (IRM, Construction Support) and Accommodation.

Why You Should Buy This Report

- The report contains data developed by Infield Systems' market modelling process, OFFPEX, which is based on a unique "bottom up approach" to forecasting. OFFPEX's component by component and project by project forecasting process is robust and has a proven track record.
- The reader is given a comprehensive presentation of the offshore market in the African region with commentary and detailed analysis covering the macro economic climate right through to analysis by country and operator in terms of both Capex and number of units forecast to be installed.
- Detailed sector analysis appraising the variances in regional and country drivers for the African offshore oil and gas market, providing insight into the trends expected within the market over the next five years.

Global & Regional Perspectives Market Reports

Infield Systems publishes a range of market reports covering various aspects and regions of the oil, gas, renewable energy and associated marine industries. Utilising comprehensive in-house project databases, industry models and research capacity these reports are widely used by industry analysts and professionals:

- Deep & Ultra-deepwater
- Subsea
- Pipelines & Control Lines
- Fixed Platforms
- Floating Production Systems
- Offshore LNG
- Specialist Vessels & Accommodation
- Subsea Well Intervention
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- Africa
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- Asia
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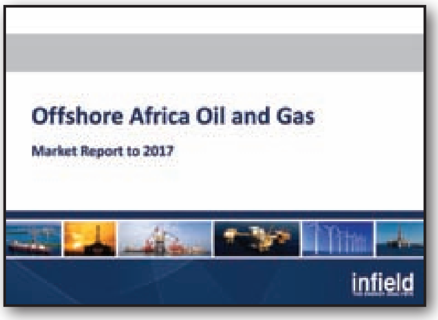
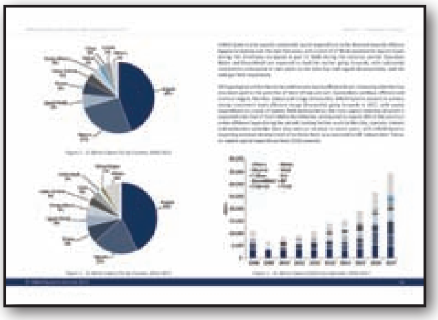
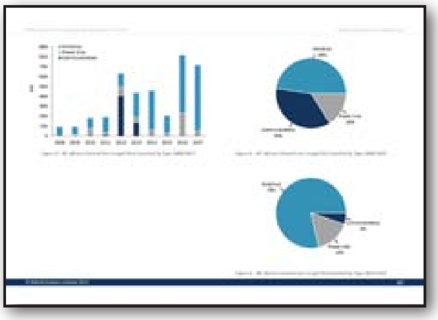
- Latin America
- Middle East & Caspian
- North America







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Online Database

Purchasers of the Regional Perspectives Offshore Africa Oil and Gas Market Report To 2017 receive 12 months access to a database of fields being planned or considered for development in the current year and four years forward, offshore Africa, via the InfieldLive Data Portal. InfieldLive is continually updated and purchasers receive the following information about each offshore field:

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- Date / Year On Stream
- Date / Year Discovered
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- Field Production Rates
- Location
- Development Type
- Water Depths
- Project Status
- Depletion Date /Year

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North America	200	100	400
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Asia	900	450	1800
Australasia	200	100	400

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About Infield Systems

Infield Systems is an independent energy research and analysis firm that is dedicated to the provision of accurate and up-to-date data, market reports, mapping, analysis and forecasts for the offshore oil and gas and associated marine industries. Infield Systems also prepares market due diligence on mergers, acquisitions and transactions for clients in the energy industry. Infield Systems services clients in over 40 countries, including E&P companies, contractors, manufacturers, government agencies and financial institutions, and is widely acknowledged as the definitive independent source for information, research and analysis on the offshore energy sector.

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