



**PETROLEUM AUTHORITY
OF UGANDA**



JOINT MEDIA BRIEFING

STATEMENT ON UGANDA'S OIL AND GAS SECTOR: KEY MILESTONES FOR 2022 AND OUTLOOK FOR 2023

BY

HON. DR. RUTH NANKABIRWA SSENTAMU

MINISTER FOR ENERGY AND MINERAL DEVELOPMENT

20TH JANUARY 2023

INTRODUCTION

1. Colleagues, members of the media fraternity, ladies and gentlemen, I welcome you to this joint media briefing, which will focus on the milestones achieved in Uganda's Oil and Gas sector during 2022 and the outlook for 2023.

2. You will agree that the year 2022 is of great significance for Uganda's oil journey. As the world was recovering from the COVID-19 pandemic, Uganda made significant strides toward achieving commercial production, commonly referred to as First Oil.
3. Critical among these was the announcement of the Final Investment Decision (FID) for Uganda's Oil and Gas projects on February 1, 2022, which unlocked the inflow of **US\$15 billion** into the country's economy. This milestone is unprecedented and undoubtedly the largest project in terms of value in the country and the East African region. It has opened the way to activity and investment in the country.
4. My Ministry, together with the Petroleum Authority of Uganda (PAU) and the Uganda National Oil Company (UNOC), are, therefore, glad to provide periodic updates on the status of petroleum activities in the country through this media briefing.

Milestones for 2022 and Outlook for 2023

5. The Upstream and Midstream petroleum activities and operations in the country are being undertaken as follows:
 - a. **Oranto Petroleum Limited** and **Armour Energy Uganda Limited** are licensed to undertake petroleum exploration.
 - b. **TotalEnergies E&P Uganda**, **CNOOC Uganda Limited** and **Uganda National Oil Company (UNOC)** are licensed to prepare the already discovered oil fields for petroleum production operations.
 - c. On the other hand, the **East African Crude Oil Pipeline (EACOP) Limited** and the **Albertine Graben Energy Consortium (AGEC)** are developing. They will manage the infrastructure to commercialize Uganda's Oil and Gas resources, namely the EACOP and Refinery.
 - d. **UNOC** represents the Government of Uganda's commercial interests and is a joint venture partner to the licensees operated by CNOOC Uganda Ltd and TotalEnergies, as well as a shareholder in both the refinery and EACOP projects

- e. In addition to these licensed oil companies, there are about **175 contractors and sub-contractors** to those licensed companies. These include some of the world's biggest and most well-established engineering companies, with significant capital bases and enormous experience. Some have now established full operational offices and facilities in the country.

Uganda's Petroleum Resources

6. Uganda is now one of the most established petroleum provinces in the world, with an estimated volume of 6.5 billion barrels, with 1.4 billion barrels are recoverable, of which 1.04 billion barrels are classified as reserves. Recoverable gas resources are estimated at 500 billion cubic feet.
7. To increase the country's oil and gas resources, the Directorate of Petroleum in the Ministry continues to conduct geological mapping and geophysical surveys in the Moroto-Kadam basin. The surveys in Uganda's northeastern and eastern districts of Moroto, Napak, Nakapiripirit, Katakwi, Bukedea, Kapchorwa, Bulambuli, and Kumi cover a total surface area of 5,672 sq. km.

Petroleum Exploration Activities

8. Continued petroleum exploration and development of prospective petroleum resources will positively impact prolonging and increasing production. Oil and Gas exploration activities registered progress during 2022.
9. In the Ngassa Contract Areas in Hoima District, the technical studies have identified five drillable prospects; one onshore and four offshore. Oranto Petroleum is expected to commence drilling of the exploration wells in 2023.
10. Technical studies have confirmed four prospects for the Kanywataba Contract Area in Ntoroko District. Armour Energy Uganda Ltd is in preparation to drill a well at Ntajumba, one of the prospects, this year.

Petroleum Licensing

11. Through the Ministry of Energy and Mineral Development, the Government is preparing to execute Production Sharing Agreements with **UNOC and DGR-Global** – the two successful companies from the Second Licensing Round that commenced in May 2019. Exploration licenses will soon be issued to UNOC (Kasurubani block – 1,285 sq. km) and DGR Global (Turaco block – 637 sq. km). Six oil companies applied for prequalification for the five blocks on offer, and four were shortlisted.
12. The Ministry also plans to announce a Third Licensing Round during the East African Petroleum Conference and Exhibition, scheduled to take place in May 2023 in Kampala.

Development and Production of the Discovered Resources

13. The development and production of the discovered Oil and Gas resources in Uganda is undertaken through the Tilenga and Kingfisher projects. The seven fields in the Tilenga project are expected to have a peak production of 190,000 barrels per day, whereas the Kingfisher field will have a plateau of 40,000 barrels per day at First Oil.
14. Three other oil fields from the Kaiso Tonya area are planned to come on stream five years after First Oil. These fields, which will come on stream later, will contribute to maintaining peak production over a longer period and enable a gentle decline in oil production.
15. Planning to develop these resources has led to an exponential increase in activities and operations in the country, specifically in the Albertine Graben. These activities are approved and monitored by the Petroleum Authority of Uganda.

The Kingfisher Project

16. The development plan for the Kingfisher field includes the onshore drilling of 31 wells from four well pads. Therefore, the Oil and Gas resources from this

field are planned to be produced from 20 wells, with 11 water injection wells to maintain pressure to support production.

17. The Engineering, Procurement and Construction (EPC) work and services for the Kingfisher Development Area (KFDA) project were subdivided into four packages. These include pre-drilling civil works, oil field infrastructure, oil field production facilities, and installing the KFDA Project Feeder Line, with completion rates between 19.49per cent and 46.53per cent.
18. In addition to the four EPC work packages, several contracts for works, goods and services for Drilling and Completions for developing and producing wells have been awarded to various companies.
19. The Drilling Rig for the KFDA, LR8001, arrived in Mombasa on September 12 2022, and a total of 280 trucks delivered it in bits at the Pad-2 site in the Kikuube district. Its erection and installation works were concluded in November 2022.
20. On November 24, 2022, I launched the Kingfisher Drilling Rig, which will be used to drill all 31 wells, including the deepest KFDA well over seven kilometres-depth.
21. Third-party inspections were subsequently conducted, and the rig will be officially commissioned before the end of January 2023.

The Tilenga Project

22. The Tilenga project will be undertaken through onshore drilling from 31 Well pads with three drilling rigs. The project will produce 190,000 barrels of oil per day at peak. The project area covers parts of the Buliisa and Nwoya districts, North and South of the Victoria Nile.
23. The key ongoing project activities include enabling infrastructure works; detailed Engineering, Procurement, Supply, Construction and Commissioning (EPSCC); Drilling & Wells; and Geosciences.

24. The highlights from the activities undertaken during 2022 show significant progress has been made in enabling Infrastructure works for the Access Roads to the different facilities.
25. Further efforts have been made towards completing the first well pad to be drilled (JBR-5) in time for the expected spudding of the first Tilenga development well at the end of Quarter 1, 2023.
26. In addition to the above, other enabling infrastructure works aimed at facilitating the construction phase of the Tilenga projects include the following.
27. Regarding the preparations for development drilling, one of the three rigs required to drill the 426 wells for the Tilenga Project arrived in Mombasa on October 19, 2022, and is currently kept at JBR-5, awaiting assembly.
28. Construction of Rig 2 and Rig 3 is at 100per cent completion, while assembly inspection, Factory Acceptance Test (FAT) and Endurance Test are at 100per cent and 85per cent, respectively. Shipments of the two remaining rigs to Uganda are ongoing.
29. Besides, installation of generator facilities, fuel tank storage areas and building warehouses at the Drilling Support Base located within the Tilenga Industrial Area. In addition, the contractors are assembling, testing, and calibrating some of the equipment delivered on-site in preparation for the commencement of development drilling is expected to commence in the first quarter of 2023.

Commercialization of the Discovered Resources

30. The production of the country's Oil and Gas resources requires an efficient route to market, which will be achieved through the two agreed commercialization projects: the Uganda Refinery project and the EACOP project. The development of the Refinery and the EACOP projects are being undertaken co-currently, and when both projects are operational, the Refinery will have the first call on crude oil. Having both projects will also ensure

continuity in production, especially during periods when either project may be shut down for maintenance.

The EACOP Project

31. The EACOP project provides Uganda's crude oil access to the international market and, therefore, enhances the value of the resources. The transboundary pipeline consists of a 30 meters wide corridor totalling 1,443 kilometres. It is approximately 296km in Uganda, starting at Kabaale in Hoima, traversing ten districts in Uganda and 22 in Tanzania, up to Chongoleani in Tanga.
32. Following the signing of the key agreements in April 2021 and the announcement of FID in February 2022, EACOP Limited intensified activities in Uganda and Tanzania. Subsequently, in July 2022, EACOP Limited submitted its application for a pipeline construction license to MEMD and the Energy Water and Utilities Regulatory Authority in Tanzania.
33. The application was published in the gazette as required by law, and no objection was raised to granting EACOP Ltd the license to construct the EACOP. The review and evaluation of the applications in Uganda have been completed, and Cabinet provided approval to issue the license, and I am issuing the license this week.
34. Early Civil works for the EACOP project have commenced on the Tanzanian section, and the civil works on the Ugandan side are expected to start this year.

The Uganda Refinery Project

35. The Albertine Graben Energy Consortium (AGEC) submitted the Refinery project Front End Engineering Design (FEED) to the Government in August 2021, and PAU accordingly approved it in July 2022.
36. The Ministry is facilitating the negotiation of the three key agreements required to enable the Refinery project. These negotiations cover the Crude Oil Supply Agreement (CSA), the Implementation Agreement (IA), and the Shareholders Agreement (SHA).

37. AGEC contracted a JV between Det Norske Veritas-Germanischer Lloyd (DNV-GL) and a Ugandan company, Atacama Consulting Ltd, to undertake the ESIA for the Refinery project. This is expected to be submitted to NEMA for approval during Q1 of 2023. The FID for the Refinery is expected this year, 2023.
38. The Refinery Project will also include the construction of a 213-kilometre refined products pipeline from Hoima to Namwabula-Mpigi. At least 72per cent of the 4,270 project-affected persons have signed for compensation, and payment of compensation stands at about 41per cent.

Gas Commercialisation

39. Oil treatment during production will generate associated gas that will be first utilized to satisfy the requirements for the facilities, such as heating, and power requirements, for the normal oil production activities as a priority. The Government required the Upstream licensees to conduct studies to determine the optimal utilization of any excess associated gas realized after meeting these requirements.
40. The studies recommended Liquefied Petroleum Gas (LPG) recovery from excess associated gas. The recovered LPG will be used to meet local and regional demand. In addition, the Refinery project in Hoima is projected to produce LPG in its product slate. Therefore, the Tilenga, Kingfisher and Refinery projects are projected to produce about 330,000 tonnes per year of LPG at peak. This aligns well with the Energy Transition plan for the country, where we seek to minimize the usage of biomass to address the challenges of deforestation and climate change.
41. CNOOC Uganda has submitted designs for the utilization of excess gas, which includes the development of a 39.1 megawatts (MW) Gas to Power Plant that will produce power for the CPF, as well as export excess power to the grid via a 46km high voltage transmission line to Kabaale Substation, and production of LPG.
42. TotalEnergies EP Uganda revised its previous proposal of utilizing all the excess associated gas to generate electricity to include recovery of LPG as a

strategy for carbon footprint reduction. This proposal was approved in May 2022. The companies are expected to apply for the respective licenses during 2023 upon completing the required studies.

43. LPG is a highly versatile energy source and can be used in a wide range of applications such as water and space heating, cooking, and alternative transport fuel. KFDA will produce 20,000 metric tonnes of LPG per year, while Tilenga will produce 80,000 metric tonnes per year. The Refinery, when operational, will provide over 225,000 metric tonnes of LPG. This will go a long way in supporting government efforts to fight deforestation by providing a reliable substitute for charcoal and firewood.
44. In July 2022, my Ministry embarked on the distribution of LPG Starter Kits aimed at scaling up the usage of cooking gas in households. This intervention targets LPG cooking energy to grow from about 0.8 per cent to 20 per cent of Ugandan households by 2030. The Ministry shall distribute 1 million LPG Starter Kits to Ugandans for free in five years – comprising locally manufactured 13kg cylinders with accessories and a cook stove. Increased usage of LPG will address the problem of continued dependence on biomass, resulting in a massive reduction of plant cover, which is currently manifested through prolonged dry spells that have recently been experienced.

Management of Costs and Economic Analysis

45. The activities in the Upstream and Midstream sub-sectors require a significant capital investment of more than US\$15 billion. This expenditure, especially under the Tilenga and Kingfisher projects, is cost-recoverable when commercial production commences. The costs for the Midstream projects also affect the overall profitability of the projects.
46. The Government promotes an efficient cost environment and undertakes economic analysis for Oil and Gas projects to ensure that the profitability of the projects is maintained and that Government's take from the oil and gas resources is not eroded. Uganda's track record for managing costs during the exploration phase has been exceptionally well, which is also being done for the much higher development costs.

47. The Government routinely carries out an economic evaluation of the country's oil and gas projects using the PAU's Upstream Economic Model. For 2022, the results of the evaluation indicate that the total cost of developing and producing a barrel of crude oil is estimated at \$17.73 per barrel. With the EACOP tariff set at \$12.77 per barrel, the projects remain commercially viable for government and oil companies at a discount rate of 10 per cent.

Participation of Ugandans (National Content)

48. Ladies and gentlemen, you will appreciate that the exponential growth in activity and the corresponding increased investment during 2021 and 2022 has come with myriad opportunities and benefits for Ugandans. As actions on the key projects increase, the opportunities are cascaded to different levels or tiers, providing more opportunities for Ugandans and Ugandan enterprises.
49. The key areas of participation include employment, provision of goods and services, capacity building, enterprise development, and transfer of knowledge and technology.
50. In terms of employment, by November 2022, 6,233 people were employed within the sector, of which 5,875, representing 94 per cent, were Ugandans. The Licensees directly employed 506 people, 70 per cent of whom are Ugandans, while their contractors and subcontractors employed 5,647 people, 97 per cent of whom are Ugandans. Compared to the estimated number of jobs, this is slightly less than half of what is expected.
51. Similarly, by the end of 2022, the National Oil and Gas Talent Register (NOGTR), PAU established in February 2019, had 7,695 registered talents and 117 employers. In 2022 alone, 1,750 registered on the NOGTR, representing 23 per cent of the total number of talents registered since the platform was launched. A total of 373 jobs were posted on the system by different employers.
52. Regarding the utilization of Ugandan goods and services, the cumulative value of the 206 Tier-1 contracts reviewed after the launch of the projects in April 2021 stood at close to **US\$ 6.9 billion** at the end of 2022. Ugandan companies

made **US\$1.7 billion** (or 25 per cent) through direct Tier-1 contracting (**US\$ 958.4 million**) and Tier-2 subcontractors from international companies (**US\$746.1 million**). Close to 700 Tier-2 contractors are actively participating in the ongoing activities.

53. The foreign companies awarded contracts at Tier-1 and Tier-2 levels are expected to sub-contract more to Ugandan companies at the lower contracting levels. This is expected to increase the participation of Ugandan entities in the sector towards the targeted 40 per cent participation.
54. The PAU continues to use the National Supplier Database (NSD) to monitor the utilization of Ugandan goods and services in the sector. Only companies registered on the NSD are eligible to supply goods and services to the industry. Since its establishment in 2017, 2,350 have been qualified and registered on the platform, up from 513 in 2017. Of these, 1,827 are Ugandan entities, while 523 are foreign companies.
55. Regarding the skilling of Ugandan nationals and enterprises for business and employment opportunities, valuable partnerships have been made with private, public and development partners. As a result of the skilling efforts undertaken through these partnerships. A total of 11,021 Ugandans have been trained for the last six years, 2017-2022, in both the vocational and technical aspects of the sector, with 940 Ugandans attaining international industry certifications. Additionally, 200 MSMEs were trained in Business Development in 2022.
56. In 2022, Ugandan companies could provide goods and services worth over **US\$ 524 million (17.5 per cent)** out of the total investment into the sector of US\$ 2.995 billion at the end of September 2022. **US\$ 866,853** was contracted from the host Districts of Hoima, Buliisa, Masindi and Pakwach. The projected investment for 2023 is estimated at US\$1.8 billion Dollars.
57. The total number of Ugandan companies that participated in providing goods and services is 187.

58. My Ministry is also working with the Ministry of Finance, Planning and Economic Development to establish the Local Content Development Fund to provide affordable financing to Ugandan companies to participate in the oil and gas sector.

Environment, Health, Safety, and Social Management

59. It is important to note that Oil and Gas operations in Uganda are undertaken safely and in a way that does not harm people and the environment. Government agencies and licensed companies prioritize the environment, health, safety and social protection during Oil and Gas activities.
60. One of the key milestones for 2022 was the launch of the National Oil Spill Contingency Plan (NOSCP) in March 2022 by the Rt. Hon. Prime Minister, Robinah Nabbanja. The NOSCP is a national framework and command structure for planning, preparation, and response to oil spills. The NOSCP and the related regulations require local governments and lead agencies to develop oil spill contingency plans. The Petroleum Authority of Uganda is the Competent National Authority responsible for managing oil spills.
61. Climate change is one of the core factors influencing and driving the global future of the oil and gas industry, with implications for Uganda's planned Oil and Gas developments. The Government has taken cognizance of the climate change developments at both global and national levels to track the developments and ensure that Uganda's projects continue to be achieved with minimal carbon intensity. It should be noted that the climate change aspects of the Tilenga, Kingfisher and EACOP projects were already assessed within the Environment, Social and Impact Assessment studies approved by the National Environment Management Authority.
62. In November 2022, I led a 14-man Ugandan delegation to the 27th Conference of the Parties to the Climate Change Convention (COP 27) in Sharm el-Sheikh, Egypt. Our objective was to keep track of the emerging climate change issues and to build synergies with the various stakeholders on various aspects that foster development in the industry.

63. The Government also undertakes Biodiversity monitoring to ensure the harmonious co-existence of Oil and Gas activities and biodiversity conservation. These initiatives also enhance the co-existence of the Oil and Gas sector with other sectors of Uganda's economy, such as tourism.
64. The process of acquiring land for the projects progressed considerably well. The process involves resettling the affected persons, compensating them, and implementing livelihood restoration programmes.

Activism against Uganda's Oil Projects

65. There was intensified activism against the development of Uganda's Oil and Gas sector in 2022. Local and international individual campaigns and agencies targeted the EACOP project, claiming it was an "environmental and social disaster". It should be noted that the campaign against EACOP is, by extension, a move against entire Uganda's oil project and the socio-economic development of Uganda.
66. These activities have, therefore, necessitated increased communication and stakeholder engagement efforts led by my Ministry, Government agencies, and the other key players in the industry. The Government has since improved communication and publicity around Uganda's oil and gas industry to avert the activists' misinformation and distortion of facts. These include enhanced communications through traditional and digital media, stakeholder engagements and publication of factual data on the environment, social and governance aspects. This has led to increased understanding and support for Uganda's oil projects.
67. Furthermore, through establishing strategic partnerships with national and international agencies, Uganda will continue to benchmark best practices on key areas such as cross-border regulation, oil spill and emergency response, operations in biodiversity-rich areas, ICT, and data management.
68. There is a concerted effort to enhance the collaboration and coordination between relevant Government Ministries, Departments and Agencies (MDAs) in the sector. Joint Government approaches in communication, monitoring, and legal aspects will continue being implemented this year.

East African Petroleum Conference and Exhibition

69. Uganda will host the 10th East African Petroleum Conference and Exhibition (EAPCE) between May 9-11, 2023, at the Kampala Serena Hotel, and the preparations are ongoing. The Conference presents the East African Community member-states and the international community with an opportunity to promote the oil and gas potential of the region.

70. I take this opportunity to invite local and international stakeholders in the oil and gas industry and the business community to register and submit abstracts for the EAPCE conference. Submissions of Abstracts for consideration for presentation at the Conference are still ongoing till January 31, 2023.

71. Finally, I wish to emphasize that Uganda remains committed to developing its oil and gas resources for the economic benefit of all Ugandans. Our target for First Oil remains in 2025.

I thank you.

FOR GOD AND MY COUNTRY