IMPLEMENTATION OF THE NATIONAL CONTENT POLICY: PROGRESS AND CHALLENGES

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OUTLINE

1. Introduction
   • Status of the Oil and Gas Sector and its regulation
   • What is National Content

2. Where are the opportunities

3. What are the opportunities

4. Challenges

5. Conclusion
1. INTRODUCTION

Mandate

- Sustainable exploitation and utilisation of the Petroleum resources is at the core of Government’s mandate for the sector.
- Government’s strategies and actions for the petroleum sector are aimed at using the resources to create lasting value to both current and future generations.
## 1. INTRODUCTION

### Institutional Framework

| **DIRECTORATE OF PETROLEUM**  
| (In Ministry of Energy and Mineral Development) | • To support in Policy formulation and licensing of acreage  
|  | • Upstream, Midstream and Downstream depts. |
| **PETROLEUM AUTHORITY OF UGANDA** | • To regulate and monitor Upstream and Midstream sub-sectors  
|  | • Ensure compliance of petroleum operations |
| **UGANDA NATIONAL OIL COMPANY LTD** | • To move forward the country’s commercial interest in PSAs  
|  | • Create Joint Ventures across the petroleum value chain |

Other stakeholders are NEMA, UWA, URA, UNRA, Auditor General etc.

Roles of Public and Private Sector players defined in the National Oil and Gas Policy for Uganda, 2008
1. INTRODUCTION: Who is the Petroleum Authority of Uganda?

Statutory body established under Section 9 of the Petroleum (Exploration, Development and Production) Act 2013, and in line with the National Oil and Gas Policy for Uganda which was approved in 2008.

Mandate is to monitor and regulate the exploration, development and production, together with the refining, gas conversion, transportation and storage of petroleum in Uganda.

**Vision:**

- To be a Leading Petroleum Regulatory Agency.

**Mission Statement:**

- To regulate and monitor the petroleum sector in order to create lasting value for society and contribute to Uganda being a sound investment destination.
1. INTRODUCTION: REGULATION

Fundamentals

Optimise Oil recovery;
Scrutinise and approve petroleum recovery mechanisms

Minimise costs
• Less than USD 1 finding costs against USD 5 – 20 industry range
• Minimised during development & production

Environmental & Social protection
Monitor the impact of the sector activities on the environment

Health Safety and Security
• Enforce health and safety standards to safeguard human life and investment

National Content
Enterprise Devt, Capacity Building, Employment, Tech. transfer

Management of Petroleum Data

INVESTMENT FOR SUSTAINABLE DEVELOPMENT
1. INTRODUCTION: What is National Content

**Definition**
Value added or created in the Ugandan economy through the employment of Ugandan workers and the use of goods produced or available in Uganda and services provided by Ugandan citizens and enterprises.

**Key Pillars**
- National Oil Company
- Use of locally produced goods and services
- Enterprise development
- Employment
- Capacity building
- Transfer of knowledge and technology

**Ultimate goal:**
To achieve in-country value creation and retention whilst ensuring competitiveness, efficiency and effectiveness.

**What National Content is not**
- Ownership
- Protectionism
- Compromise on standards
1. INTRODUCTION: Where are the opportunities

Key Projects

Road to First Oil ~ US$ 15 - 20 Billion Investment

- **Upstream Devt**
  - New Exploration
    - $40 million
  - CPFs, Pipelines and access roads, camps
    - $8 bn

- **Uganda Refinery Project**
  - 60,000 bpd
  - Refinery, 211km products pipeline
    - $3-4 bn

- **East Africa Crude Oil Pipeline**
  - ~200,000 bpd
  - $3.55 bn

- **Support Infrastructure**
  - Airport, Industrial Park, Roads
    - $1 bn

Opportunity for National Content Development
1. INTRODUCTION: STATUS OF THE OIL AND GAS SECTOR

- 2006 – Commercial Discovery
- 21 Discoveries; 88% drilling success rate
- 6.5Bbbls STOIIP; 1.4Bbbls, 500Bcf gas
- 9 PLs over 14 discoveries
- 3 PLAs under review
- 3 ELs issued in Sept-Oct 2017
- Exploration of new acreage commenced in 2018
1. INTRODUCTION: STATUS OF OIL AND GAS THE SECTOR

**Tilenga Project**

- Total: Jobi-Rii, Ngiri & Gunya fields
- Tullow: Kigogole-Ngara, Nsoga, Ngege, Kasamene-Wahirindi.
- Production plateau of ~190k bopd - 4yr plateau
- 35 wellpads (MFNP-10 and South-25)
- ~ 412 wells (190 OP/189 WI/33 Obs)
- Buliisa–Kabaale Feeder pipeline: 95 km, 24" pipeline
- RAP ongoing
- FEED Completed
- ESIA report submitted to Government, under review
1. INTRODUCTION: STATUS OF OIL AND GAS THE SECTOR

Kingfisher Project

- CNOOC - Kingfisher field.
- Tullow – Future tie back from Kaiso Tonya (Mputa-Nzizi-Waraga) fields
- Production plateau of ~40k bopd 5yr plateau
- ~ 31 wells on 4 well pads in KF (20 OP, 11 WI)
- ~ 20 wells on 3 well pads in KT
- Kingfisher-Kabaale Feeder pipeline: 46km, 12”
- RAP and ESIA studies are ongoing
- FEED Completed
1. INTRODUCTION: STATUS OF THE OIL AND GAS SECTOR

**Refinery Project**

- Uganda consumption approx. 32,000bbl/day; growing at a rate of 7% p.a.
- Feasibility of refining in Uganda confirmed
- Refinery of 60,000bbl/day planned to be developed located in Kabaale, Hoima
- PFA with lead investor (AGRC) signed: Pre-FID activities (FEED, ESIA etc) to commence.
- ~US$ 3-4 billion project (includes 211km products pipeline).
- GoU’s stake to be held through the Uganda Refinery Holding Company (URHC) - a subsidiary of the Uganda National Oil Company (UNOC).
- 29 Sq.km of land acquired (5 sq. Km for refinery): 98.7% of PAPs compensated
1. INTRODUCTION: STATUS OF THE OIL AND GAS SECTOR

East African Crude Oil Pipeline (EACOP) Project

- Hoima (Uganda) - Tanga (Tanzania)
- 1445km long, 24-inch diameter with CAPEX US$ 3.5 billion
- Project partners; GoU, GoT, Upstream licensees Uganda
- inter Governmental Agreement - Ug and Tz signed in May 2017
- Foundation Stone laid in Tanga – Aug 2017, Hoima and Mutukula – Nov 2017
- Negotiation of Host Government Agreements ongoing
- GIE Engineering (USA) completed FEED; Target FID; 2018
- RSK Environment Limited (UK) & Eco & Partner Consult (UG) undertaking ESIA
- Districts: Hoima, Kakumiro, Kyankwanzi, Mubende, Gomba, Sembabule, Lwengo, Rakai and Kyotera
- RAP for construction camps (4 districts) has commenced.
1. INTRODUCTION: STATUS OF THE OIL AND GAS SECTOR

Roads infrastructure Project

- Planned network of 12 roads; 580 Kilometres at US $ 500 million
- Financing by Exim Bank China and UK
- Individual road lengths range from 23 kilometres to 110 Kilometres including a 3 kilometre bridge
1. INTRODUCTION: STATUS OF THE OIL AND GAS SECTOR

Support infrastructure Project

• Master Plan for the Industrial Park developed by SMEC International (Australia);
• 29 sq.km of land in Kabaale, Hoima to host:
  • A Refinery
  • Petroleum Products Storage,
  • An International Airport
  • A crude oil storage and transmission hub,
  • Logistics warehousing
  • Petrol/Chemical Industries, among others
• Airport Development; SBI from Israel and Colas UK (SBC (U) Ltd.
• UK Export Credit Financing – US$ 300m
• Usable runway by Sept’ 2019.
1. INTRODUCTION: STATUS OF THE OIL AND GAS SECTOR

**Exploration Projects**

**Three Licenses under Exploration:**
- Kanywataba area to Armour Energy Ltd
- Ngassa deep play to Oranto Petroleum Ltd
- Ngassa shallow play to Oranto Petroleum Ltd

**Planned Work Programmes (4 years)**
- Reprocessing the existing seismic data,
- Acquiring new seismic data,
- Geological and geophysical studies
- Drilling of at least two exploration wells.

**Other Basins**
- Monitor and participate in data acquisition over unlicensed areas in Albertine Graben, Kadam-Moroto, Lake Kyoga and Hoima Basins
1. INTRODUCTION: REGULATION

Legal Framework

**Upstream**
- Petroleum Exploration Development and Production Act 2013 – Section 10 functions of PAU
- Four sets of Upstream Regulations; Technical, HSE, Metering and National Content
- Model PSA 2016

**Midstream**
- Petroleum (Refining, Conversion, Transmission and Midstream Storage) Act 2013 - (Section 6 on functions of PAU
- Three sets of Midstream Regulations (2016); HSE, National Content and Technical Aspects

**Downstream**
- Petroleum Supply Act 2003
- Regulated by the Petroleum Supply Department in MEMD
Key Pillars of National Content

- National Oil Company
- Use of locally produced goods and services
- Enterprise Development Employment
- Capacity Building
- Transfer of Knowledge and Technology
1. INTRODUCTION: Uganda National Oil Company

Vehicle for Capacity Building

- UNOC was incorporated in 2015, wholly owned by government as a commercial arm of government in the sector
- Subsidiaries
  - The Uganda Refinery Holding Company Ltd
  - The National Pipeline Company (U)

UNOC Participation along the Petroleum Value Chain

**Upstream**
- State Participation
- Launching New Ventures

**Midstream**
- State equity participation in the Refinery
- State equity participation in the export pipeline

**Downstream**
- Storage terminals

**Support Infrastructure**
- Industrial Park
1: INTRODUCTION: National Content Regulatory Tools

**Regulatory Tools**

**Utilization of Ugandan Goods and Enterprise devt**
- Work Program and Budget
- Procurement Plans
- Procurement contracts
- National Supplier Database

**Employment**
- Work Program and Budget Approval
- Human Resource plans & Reports
- Work permit recommendations
- Succession plans
- National Talent Register

**Skills Development and transfer of technology**
- Work Program and Budget Approval
- Training Plans
- Industry attachments
- Plans for technology transfer
Opportunities levels in the petroleum sector are diverse and will continue to grow across the supply chain.
2(a) National Content opportunities

list of goods and services to be provided by Ugandan companies, Ugandan citizens and registered entities:

1. Transportation.
3. Foods and beverages.
4. Hotel accommodation and catering.
5. Human resource management.
6. Office supplies.
7. Fuel supply.
8. Land surveying.
9. Clearing and forwarding.
10. Crane hire.
11. Locally available construction materials.
12. Civil works.
13. Supply of locally available drilling and production materials.
15. Communications and information technology services.
16. Waste management, where possible.
Enterprise Development; Provision of Goods and Services

25 critical industries with high potential for National Content for Uganda; IBS 2013

- Civil construction
- Road construction
- Cement Industry
- Domestic airline services
- Food supply
- Furniture manufacturing
- General maintenance
- Light equipment
- Mechanical construction
- Structural/flat steel
- Transport & Logistics (Goods)
- Vendors
- Reinforcement steel manufacturing
- Site safety and security
- Bulk material
- Catering
- Facility management
- Fuel wholesale
- Generic waste management
- Hazardous waste management
- Manpower consultancy
- Production operations
- Technical consulting
- Transportation (People)
- Work safety products
2( b) Example: some of the estimated Goods and Services; Tilenga

<table>
<thead>
<tr>
<th>TYPE</th>
<th>Description</th>
<th>Estimated need</th>
<th>Potential spend with Local Companies (k USD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regional Haulage</td>
<td>Mombasa to sites</td>
<td>250 trucks over 3 years then 100 trucks over 1 year</td>
<td>100 000</td>
</tr>
<tr>
<td>National Haulage</td>
<td>Civil works, Intra Tilenga drilling &amp; construction logistics, ...</td>
<td>250 trucks over 3 years then 30 over 1 year</td>
<td>50 000</td>
</tr>
<tr>
<td></td>
<td>Lifting equipment for drilling and construction</td>
<td>Min. 20 cranes (capacities &amp; types to be confirmed), forklifts, ...</td>
<td><em>Estimation process ongoing</em></td>
</tr>
<tr>
<td>Catering and accommodation</td>
<td>Company and Tier1 contractors</td>
<td>5000 people to accommodate</td>
<td>300 000</td>
</tr>
<tr>
<td>cases (1)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fuel &amp; lubes</td>
<td>Covering all haulage needs</td>
<td>150 millions litres fuel.</td>
<td>120 000</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Category</th>
<th>Indicative Items</th>
<th>Indicative quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personal Protective Equipment</td>
<td>Safety Boots (Assorted sizes)</td>
<td>7,500</td>
</tr>
<tr>
<td></td>
<td>High Visibility Coveralls (MSME opportunity)</td>
<td>15,000</td>
</tr>
<tr>
<td></td>
<td>Gloves</td>
<td>20,000</td>
</tr>
<tr>
<td></td>
<td>Safety Glasses</td>
<td>20,000</td>
</tr>
<tr>
<td></td>
<td>Hard Hats</td>
<td>7,500</td>
</tr>
<tr>
<td></td>
<td>High visibility vests (MSME opportunity)</td>
<td>15,000</td>
</tr>
</tbody>
</table>
2(b) Total Estimated Truck Loads

KFDA Est. materials & Equipment EPC – 1.6M Tons

Tilenga Est. Materials & Equip. 7.2M Tons

CNOOC Kingfisher: Volume of materials and equipment EPC Phase estimated to be 1.6 Million Tons.

TOTAL Tilenga: Volume of materials and equipment (CPF construction, wellpads, flowlines, drilling of 36 & 400 wells) estimated to be over 7.2 Million Tons.
2(C) Achievements in the Use of Uganda’s goods and services and Enterprise Development

Trend of total contract value spent on local companies (M'USD)

Out of the USD 133m spent in 2017, 28% were taken by Ugandan companies

Some areas include:
- Legal services
- Freight Forwarding and customs clearance
- Waste collection services
- Assorted PPE
- Catering services
- Survey services
**2d) Achievements in the Use of Uganda’s goods and services and Enterprise Development: National Suppliers Database**

<table>
<thead>
<tr>
<th>Category</th>
<th>2017 Process</th>
<th>2018 Process (as at 31\textsuperscript{st} Jan)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Application</td>
<td>Qualified</td>
</tr>
<tr>
<td>Ugandan registered</td>
<td>501</td>
<td>378</td>
</tr>
<tr>
<td>Foreign registered</td>
<td>273</td>
<td>135</td>
</tr>
<tr>
<td>Total applications</td>
<td>774</td>
<td>513</td>
</tr>
</tbody>
</table>

*Registration open: September 2018 to June 2019*
2e) Employment and projections in the Sector

**Manpower Needs in the Oil and Gas Sector**

<table>
<thead>
<tr>
<th>Type</th>
<th>Jobs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Direct</td>
<td>14,000</td>
</tr>
<tr>
<td>Indirect</td>
<td>42,700</td>
</tr>
<tr>
<td>Induced</td>
<td>105,000</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>161,700</strong></td>
</tr>
</tbody>
</table>
2(f) Achievements in employment

Licensed companies have offered direct employment to over 1,000 people with more than 70% of staff as Ugandans.

Currently, with the low volume of activities, the three licensed Oil companies employ a total of 281 people of which 87%

<table>
<thead>
<tr>
<th>Company</th>
<th>Total employed</th>
<th>Total Nationals</th>
<th>%age of Nationals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tullow</td>
<td>79</td>
<td>77</td>
<td>97</td>
</tr>
<tr>
<td>CNOOC</td>
<td>69</td>
<td>59</td>
<td>86</td>
</tr>
<tr>
<td>Total E&amp;P</td>
<td>133</td>
<td>110</td>
<td>83</td>
</tr>
<tr>
<td>Over all</td>
<td>281</td>
<td>246</td>
<td>87</td>
</tr>
</tbody>
</table>

In plan

- Development of the National Oil and Gas Talent Register.
## 2g) Skills projections

<table>
<thead>
<tr>
<th>Level 4</th>
<th>Level 3</th>
<th>Level 2</th>
<th>Level 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Engineers &amp; Managers</td>
<td>Technicians</td>
<td>Trades &amp; Craft</td>
<td>Basic Skills &amp; Entry Level</td>
</tr>
<tr>
<td>Civil/Structural Engineering</td>
<td>Mechanical Technician (722)</td>
<td>Civil/Structural Engineering (3,112)</td>
<td>Civil/Structural Engineering &amp; related Labourers (3,902)</td>
</tr>
<tr>
<td>Mechanical Engineering (152)</td>
<td>Instrumentation Technician (465)</td>
<td>Driving (1,810)</td>
<td>Hospitality &amp; Catering (1,071)</td>
</tr>
<tr>
<td>Control Centre Operations (121)</td>
<td>Logistics &amp; Supply Chain Management (314)</td>
<td>Welding (1,230)</td>
<td>Security (915)</td>
</tr>
<tr>
<td>Geological Engineering (112)</td>
<td>Electrical Technician (280)</td>
<td>Scaffolding (701)</td>
<td>Drilling Rig &amp; related Labourers (645)</td>
</tr>
<tr>
<td>Maintenance Engineering (103)</td>
<td>Drilling Rig Operator/Technician (187)</td>
<td>Mechanical Technician and related trades (636)</td>
<td>Field Production (280)</td>
</tr>
</tbody>
</table>
2h) Achievements in Skills Development

- Training of over 200 Government officers from different MDAs
- Almost 500 International certified technicians with support from different stakeholders; GIZ/ZOGA, Irish Aid, World Bank
- Support to training institutions to acquire international accreditation and certification collaboration with MoES
- Dissemination of sector needs resulting from FEED studies to over 2000 stakeholder.
- Private sector support to business Incubation. Over 50 business entities trained and another over 150 undertaking training

<table>
<thead>
<tr>
<th>Category</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pipe Fitter/Plumbers</td>
<td>109</td>
</tr>
<tr>
<td>Pipe Welder(6G)</td>
<td>18</td>
</tr>
<tr>
<td>Mechanical Fitter</td>
<td>80</td>
</tr>
<tr>
<td>Scaffolder</td>
<td>170</td>
</tr>
<tr>
<td>Rigger</td>
<td>95</td>
</tr>
<tr>
<td>Electrical</td>
<td>187</td>
</tr>
<tr>
<td>Boilermaker/Welder (3G)</td>
<td>60</td>
</tr>
<tr>
<td>Coded Welders</td>
<td>49</td>
</tr>
</tbody>
</table>
### 3. CHALLENGES AND WAYFORWARD

<table>
<thead>
<tr>
<th>Challenges</th>
<th>Interventions/ Way forward</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Limited skills and capacity</td>
<td>• Fast track enterprise development and capacity building initiatives; partnerships among stakeholders</td>
</tr>
<tr>
<td>2 Infrastructure development – roads, railways</td>
<td>• MoWT, MFPED, UNRA prioritizing oil roads and railway devt</td>
</tr>
<tr>
<td>3 Public anxiety and high expectations</td>
<td>• Increase communication efforts</td>
</tr>
<tr>
<td></td>
<td>• Government institutions and other stakeholders play their roles</td>
</tr>
<tr>
<td>4 Low Standards of National Enterprises</td>
<td>• Encouraging Joint Ventures</td>
</tr>
<tr>
<td></td>
<td>• Training Enterprises</td>
</tr>
</tbody>
</table>
4. CONCLUSION

- Oil and gas sector in Uganda is broadening from exploration to development of discovered oil and gas resources together with refining and pipeline infrastructure development.

- Opportunities are significant including employment, participation of Ugandan and linkages with other sectors like Agriculture, tourism, but preparation is required.

- The major opportunities are timebound and will mainly be available during the next 3 – 5 years

- All efforts need to be made to ensure that Uganda realizes the full benefits from the sector.

- These efforts will include providing capacity building, access to affordable financing, maintaining a good macro economic framework and providing adequate regulation
THANK YOU

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