

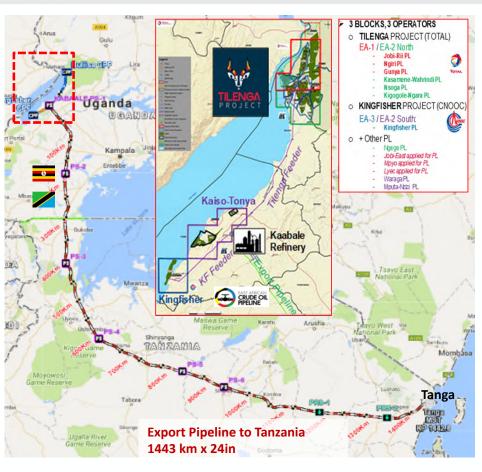
EACOP Project Presentation to:



Dar Es Salaam – 7th June 2023



LAKE ALBERT DEVELOPMENT - EACOP OVERVIEW



KEY ELEMENTS:

- UK Company with UG Branch and TZ Branch
- Aimed to conceive, build and operate the facilities required to unlock the Lake Albert Oil
- Schedule: 39 months
- External finance funding required up to 60% (3Bn\$ incl. past costs)

• UPSTREAM DEVELOPMENT:

- Two projects: Tilenga and Kingfisher
- Reserve: > 1 Billion BarilsPlateau: 10 years targeted
- DOWNSTREAM DEVELOPMENT : Local Refinery

PARTNERSHIP

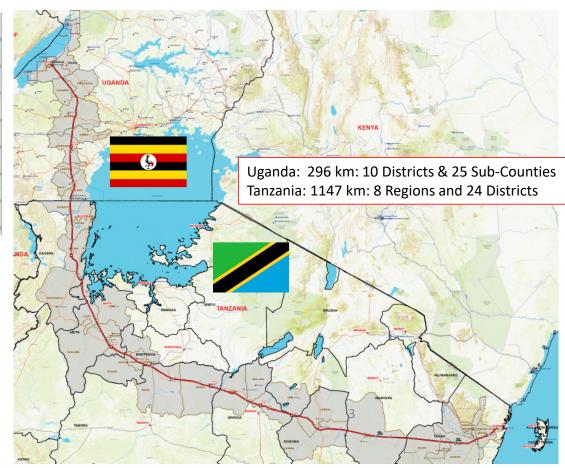


- TOTALENERGIES (62%)
- CNOOC (8%)
- UNOC (15%)
- TPDC (15%)



EACOP from KABAALE to TANGA (1443km) A 1443 km Buried Pipeline , 30 m RoW

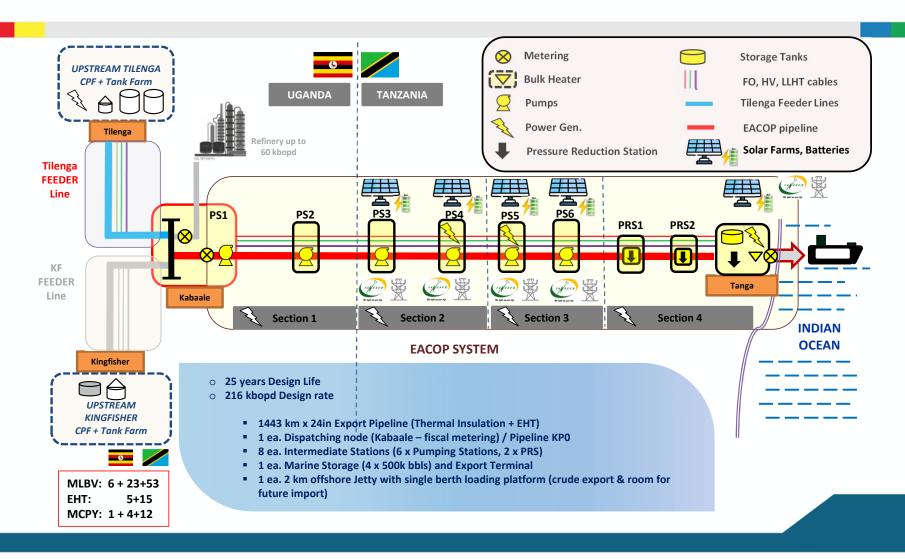






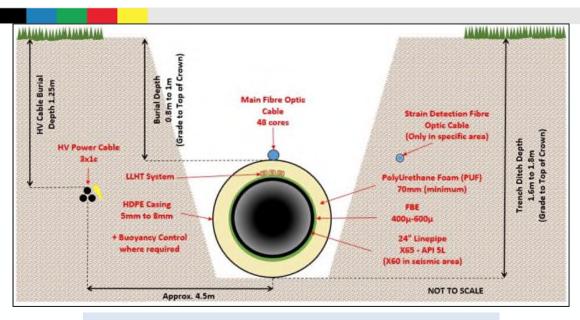


EACOP DEVELOPMENT SCHEMATIC





PIPELINE & TILENGA FEEDER LINE DESIGN

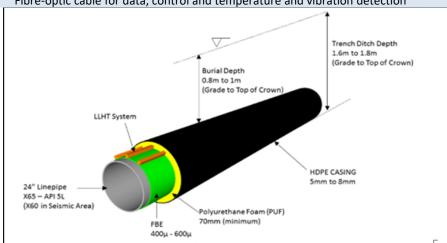


PIPELINE

- 1443 km x 24" carbon steel buried pipeline
- 296 km in Uganda and 1147 km in Tanzania
- API 5L grade X65 and X60, wall thickness ranging from 10.5 mm to 23.8 mm
- Operating at ~100 to 107 barg up to PS-6, 150 to 168 barg PS-6 to PRS-1, then ~100 barg up to Terminal
- 76 Main Line Block Valve (MLBV) stations

Thermally insulated and electrically heat traced pipelines

- Externally coated with 70 80 mm PUF thermally insulating layer and HDPE protective jacket
- 3 channels aluminium raceway for EHT cables
- 3 x 15-25 mm ∅ single core EHT cables installed in raceways
- Long Line Heat Tracing Technology (LLHT) to maintain the transported crude oil at a minimum temperature of 50 °C
- <u>23</u> LLHT substations along the route
- Up to 30 km of cables delivering ~1MW either side of each station
- Cable cores heated to ~100 °C
- 216 kbbl/d design flowrate increasing to 246 kbbl/d with DRA
- Fibre-optic cable for data, control and temperature and vibration detection





KEY FIGURES & PIPELINE ROUTE

Pipelines

- 24" x **95 km** Tilenga FEEDER Line
- 24" x **1443 km** PIPELINE

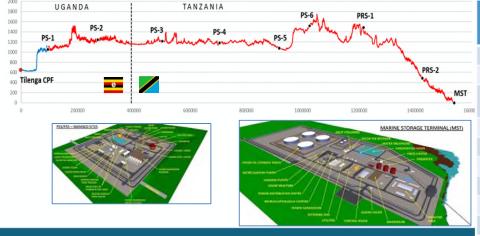
• AGI's

- Kabaale Hub Pump Station (PS-1)
- Five (5) Pump Stations (PS-2 to PS-6)
- Two (2) Pressure Reduction Stations (PRS-1 & PRS-2)

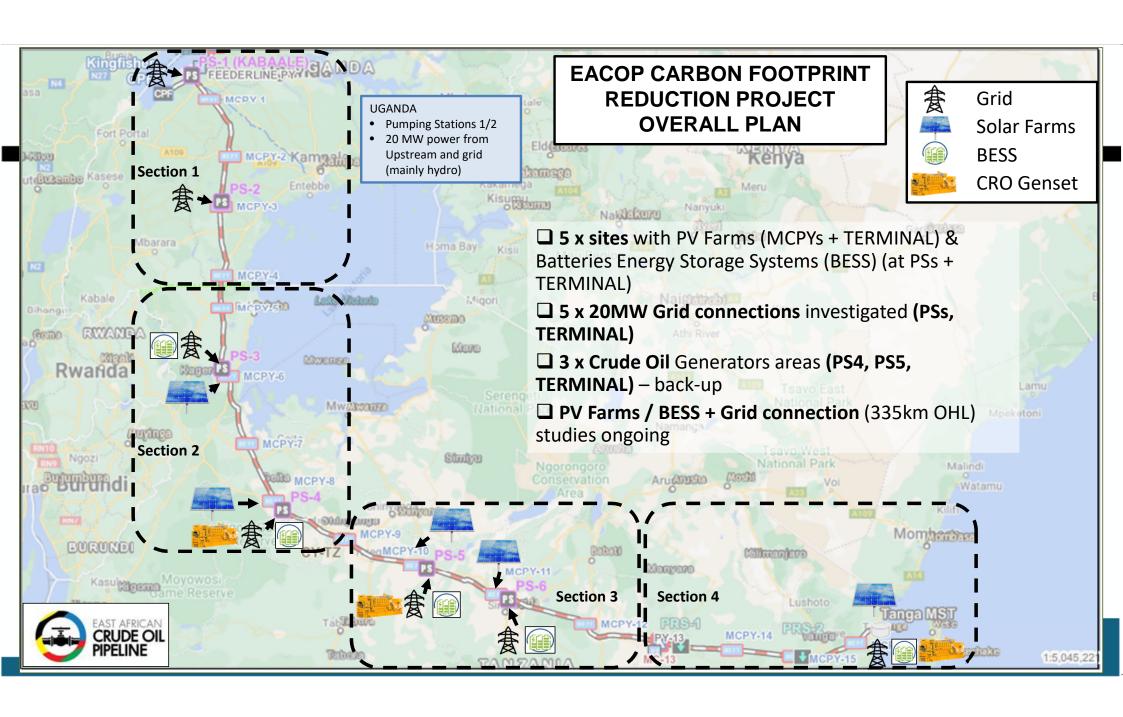
Marine Storage Terminal

- Terminal
- Storage Facilities (4 x 500k bbls Crude Oil Tanks)
- 2 km offshore Jetty to load-out platform (338 piles)



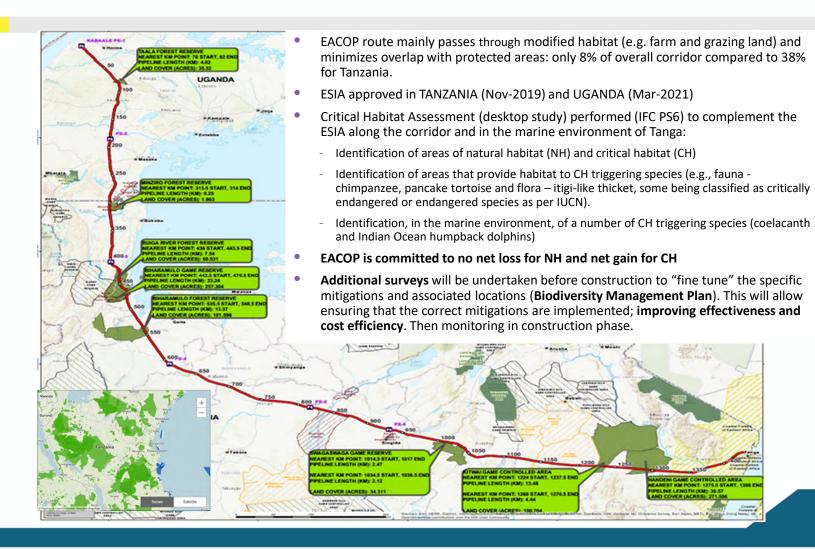


ITEM	Feeder Line	Lot 1	Lot 2	Lot 3
PL length	95 km	296 km	614 km	533 km
HDD (m)	-	-	800 m	1200m
# Joints (85,444)	5,278	16,444	34,111	29,611
# MLBV (82)	6	23	28	25
# EHT stations (20)	+	5	9	6
HV cable length	95 km	243 km	564 km	477 km
FOC length	95 km	296 km	614 km	533 km
# Camp / Yards	1	4	6	6
Coating Plant			1	





EACOP – ENVIRONMENTAL FOOTPRINT





ENVIRONMENT AND SOCIAL FUNDAMENTALS: MITIGATION HIERARCHY

Project implementation in compliance with:

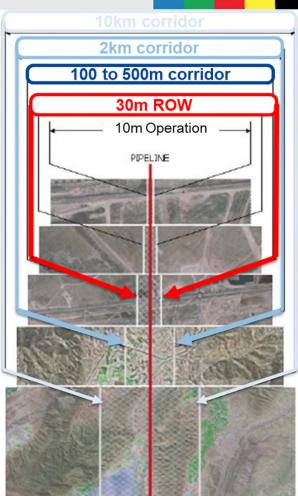
- National laws and regulations
- International Finance Corporation ("IFC") Performance Standards including:
 - PS1 Assessment and Management of Environmental and Social Risks and Impacts
 - PS2 Labor and Working Conditions
 - PS3 Resource Efficiency and Pollution Prevention
 - PS4 Community, Health, Safety and Security
 - PS5 Land Acquisition and Involuntary Resettlement;
 - PS6 Biodiversity Conservation and Sustainable Management of Living Natural Resources
 - PS7 Indigenous Peoples
 - PS8 Cultural Heritage
- UN Guiding Principles on Business and Human Rights
- Equator Principles IV and OECD Common Approach
- Requiring to avoid, mitigate, restore and offset the environmental, safety and social impacts
 - Pipeline route selection based on E&S screening study, including studies to map the
 environmental and social sensitivities. From the first selection of two corridors of 50km,
 studies and ground truthing surveys to map the environmental and social sensitivities enable
 to narrow down the corridor to a 30 m right of away
 - Minimizing physical footprint and avoiding E&S impacts
 - Stakeholder Engagement extensive contacts with government authorities in Uganda and Tanzania and engagement with local communities









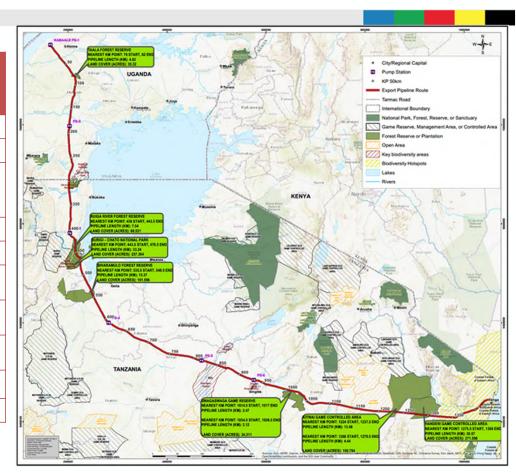


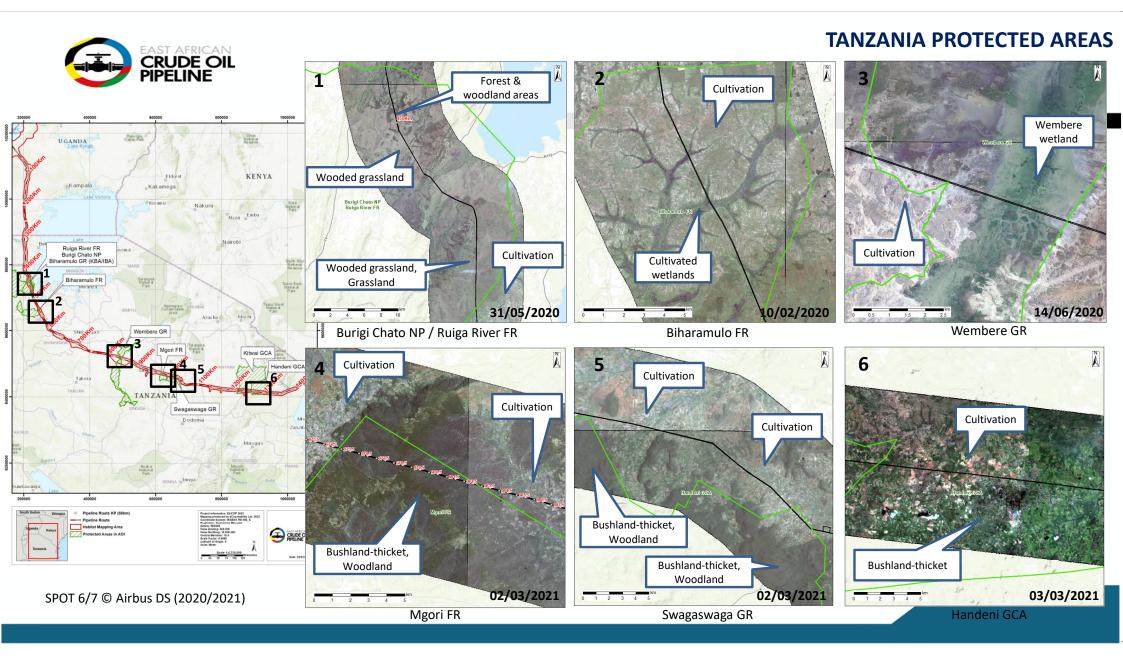


MAJORITY OF PIPELINE AVIDS PROTECTED AREAS

- Majority of EACOP pipeline route is in modified or disturbed habitat
- 10% of the pipeline corridor traverses designated protected areas impacting a land area of 3.5km2; and the majority of these are on the edges of such areas that have been modified by farmland
- EACOP does NOT cross any Ramsar internationally important wetland areas or IUCN (International Union for Conservation of Nature) categorized sites
- Tanga jetty is directly adjacent to the Tanga Coelacanth Marine Park

Protected Areas entered by EACOP Pipeline Right of Way (RoW)	Pipeline RoW length (km)	
Taala Forest Reserve	4.02	
Ruiga River Forest Reserve	7.54	
Burigi Chato National Park (formerly Biharamulo Game Reserve)	33.24	
Biharamulo Forest Reserve	13.37	
Wembere Game Reserve	12.5	
Mgori Forest Reserve	20.0	
Swagaswaga Game Reserve	4.59	
Kitwai Game Controlled Area	13.48	
Handeni Game Controlled Area	35.01	
Total	143.75	







EACOP PROJECT Contracting Strategy



EACOP

Engineering & Procurement & construction management – WORLEY - 24/2/22

- LINE-PIPES
 PCK (21/4/23)
 CPW (30/4/23) HWT
- THERMAL INSULATION ISOAF JV 18/2/22
- EITS
 (Electrical, Instrumentation Control Telecom Security)
 SCHNEIDER/SNEF 18/2/22
- LOGISTICS
 BOLLORE 18/2/22
- EACOP LLI
 Export Pumps 4/3/22
 Power Gen 27/4/22
 MLBV 28/4/22
 Electric Cables 24/6/22

Early Civil Works

(# yards / sites, all access roads, water wells)
RESERVED CONTRACTS in Uganda &Tanzania

Above Ground Infrastructures ConstructionUG + TZ: 6x PS + 2x PRS

Piipeline Construction

Uganda -391 km & Tanzania -1147 km

CPP (China) – 21/4/2023

TERMINAL - DAQING 3/5/22

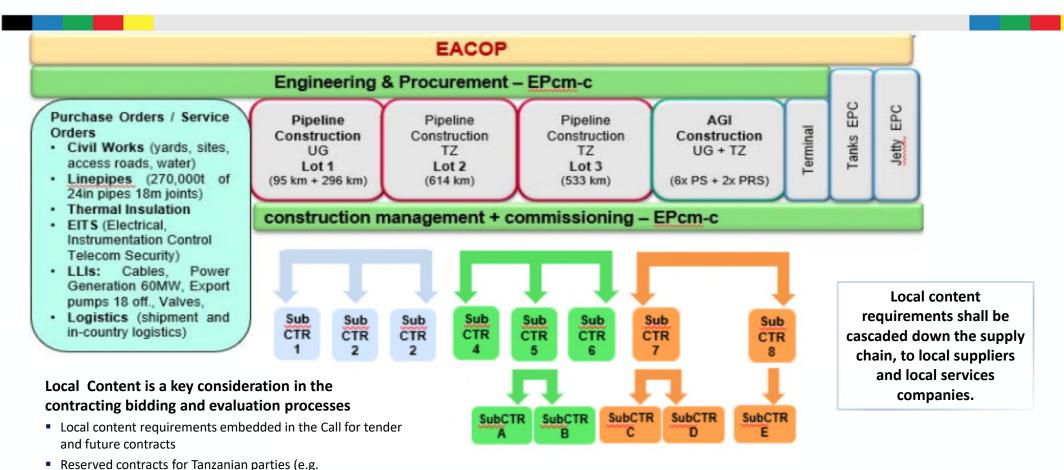
JETTY (EPC) - BBJV 1/6/2022

TANKS (EPC) - **DAQING 3/5/22**



transportation, security, fuel supply, land surveying, etc.) and focus on unbundling some contracts (early civil works)

LOCAL CONTENT - SUCONTRACTING





THERMAL INSULATION SYSTEM (TIS) - SCOPE

- Development of Thermal Insulation Coating Plant at KP 700 (Tabora Region – Nzega district)
- Design the EACOP thermal Insulation system and procurement all equipment and consumables for insulation of the EACOP linepipes :
 - Thermal Insulation System = 3 raceways + 75mm PUF + 5mm HDPE for 1,538km of 18m x 24" pipe joints (85,600 off.)
 - Thermal Insulation of ~300 Hot Induction Bends (HIB) x 24in

Productivity = 100km or 5,333 jts per month















THERMAL INSULATION PLANT IN SOJO

2022

Feb 22: TIS Contract signature **Apr 22:** start of the work at site



Sept-Nov 22: Line-pipe TIS Qualif. Austria







2023

Apr 23: 500,000 manhours at site **Mar-May 23:** plant roof installation

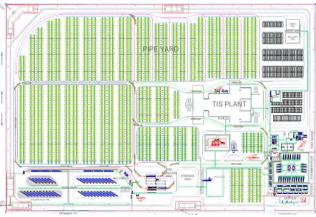


Nov 23: Start of TIS production



2024

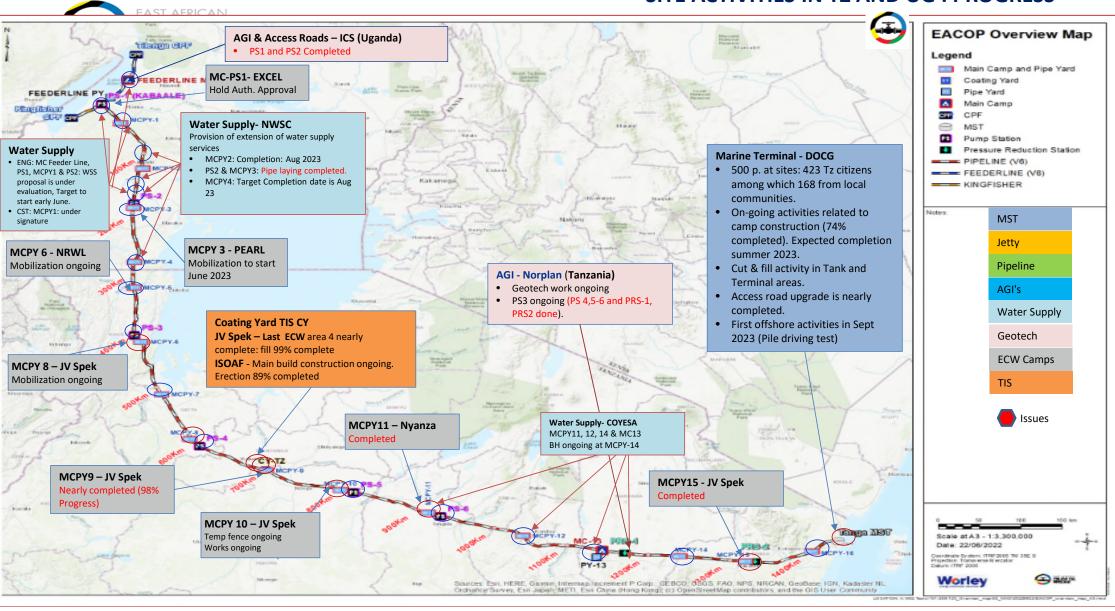
Feb 23: 300km of line-pipe insulated



Monthly production of 100km

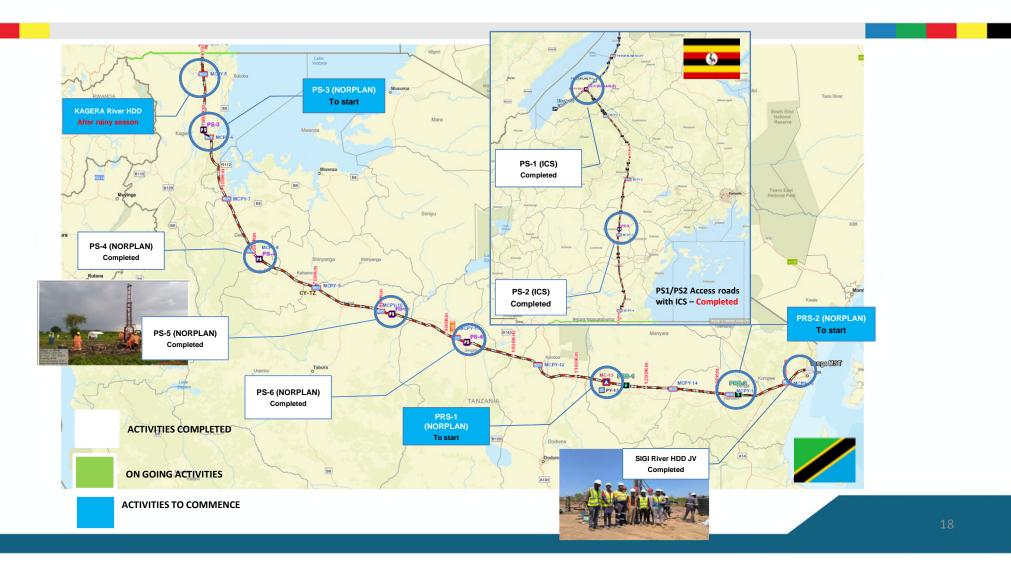


SITE ACTIVITIES IN TZ AND UG: PROGRESS



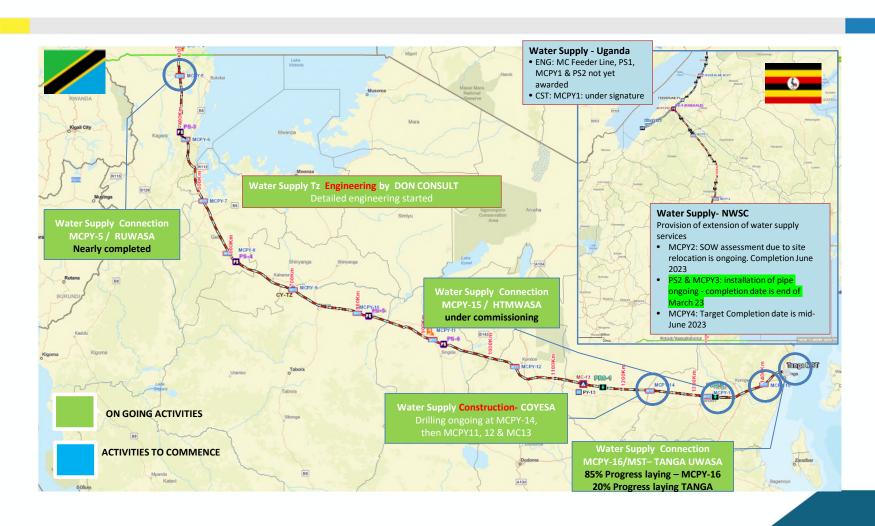


ONGOING AND GEOTECHNICAL INVESTIGATION IN TANZANIA AND UGANDA



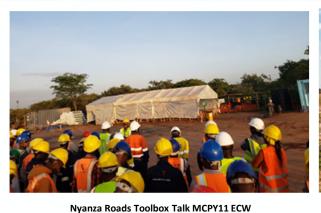


WATER SOURCING WORKS IN TANZANIA/UGANDA





EARLY CIVIL WORKS CONSTRUCTION HIGHLIGHTS – MAY 2023





Nyanza Roads Fencing MCPY11 ECW













JVSPEK Drop Chamber MCPY15 ECW

JVSPEK Sedimentation Pond MCPY15 ECW

JVSPEK Perimeter fence MCPY15 ECW

JVSPEK ditch lining MCPY15 ECW



SITE ACTIVITIES - PICTURES



MCPY 15 - Stone pitching work-outlet of the sedimentation pond



MCPY 15 - Wire mesh and HDPE liner installation-Sedimentation



MCPY9 Area 4: Material loading from sedimentation pond



MCPY9 Area 1b: Soil Crete lining at perimeter ditch



MCPY-16 (Tanga UWASA) Water line laying



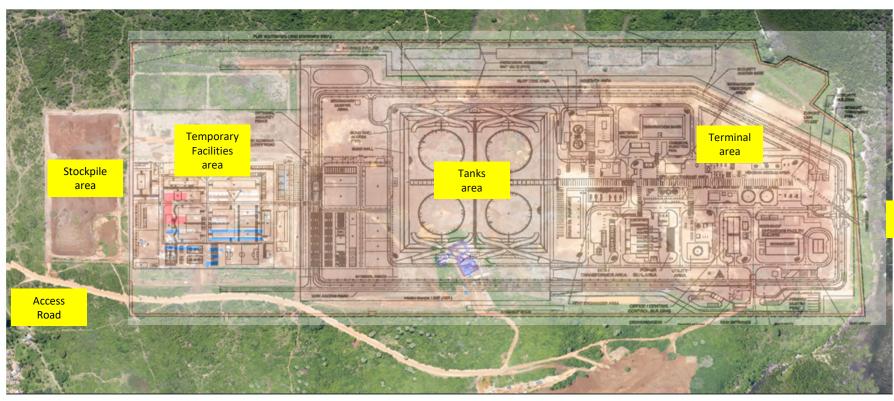
MCPY 15 – ongoing stone masonry for approach slab



Drainage chute MCPY 15



TANGA - TERMINAL AND TANKS - SITE OVERVIEW MAY 2023



Jetty area

Current Progress

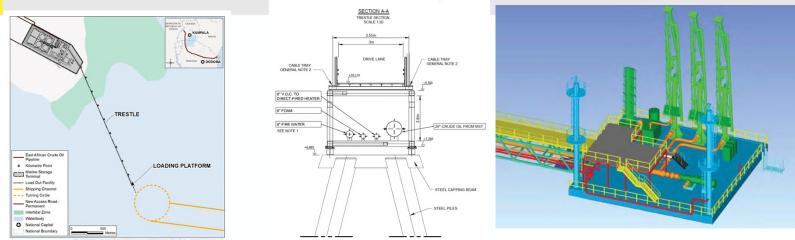
- Land clearing / temporary site fence and rainwater drainage completed
- Top soil removal ongoing (400k m3 to be moved)
- Camp accommodation under installation (56% progress)
- Access road work ongoing 67%

3 months Look-ahead

- DOCG's Temporary Facilities will be connected to TANESCO grid
- Site Preparation to be competed
- Temporary Facilities/Camp commissioned
- Foundations to be started in June 2023



TANGA JETTY – EPC CONTRACT – SCOPE OF WORK



JETTY (2kms long, 3 loading arms – Aframax & Suezmax)



Contract awarded to BESIX + BALLAST-NEDAM Joint Venture In June 2022. BBN in in charge of:

- Detailed Eng. for found./struct.
- All procurement for foundations/structure and piping. All LLI by EPcmC
- HC and FW lines
- Process equipment, including MLAs (supplied by EPcmC),
- EITS systems & room (installation only, supply by EITS contractor),



TANGA TERMINAL – PROGRESS PICTURES



1st half million M.Hs w/o LTI



MST: Camp works and view



Laying of the water supply line from Tanga UWASA



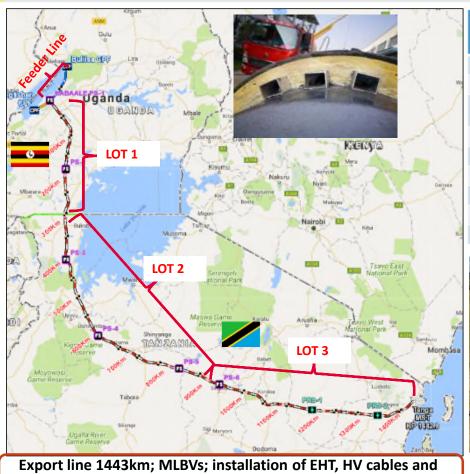
Camp works ongoing / trenching for sewage network



Maintenance of the Terminal access road



PIPELINE CONSTRUCTION SCOPE



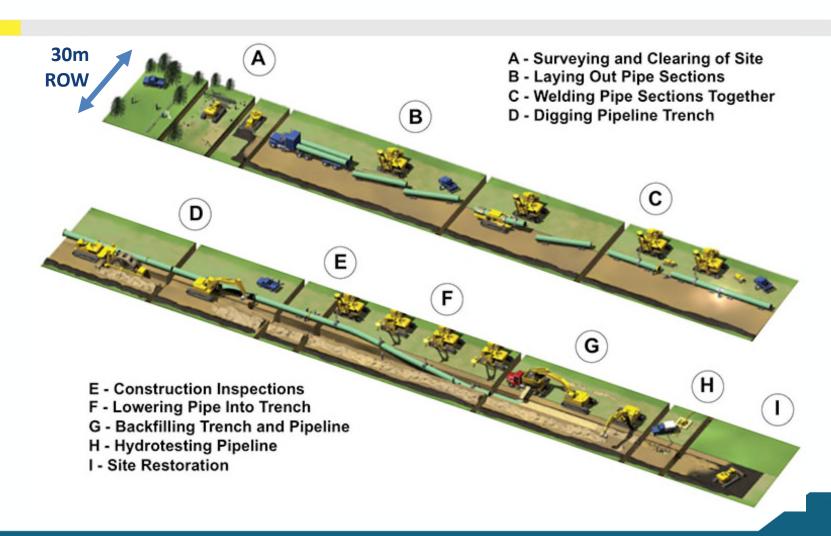
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Coating Plant			1	



Export line 1443km; MLBVs; installation of EHT, HV cables and Fibre Optic cable (10,000 km).



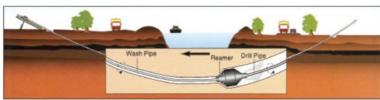
STANDARD PIPELINE CONSTRUCTION SEQUENCE



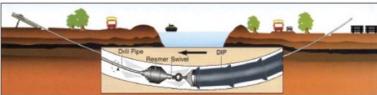


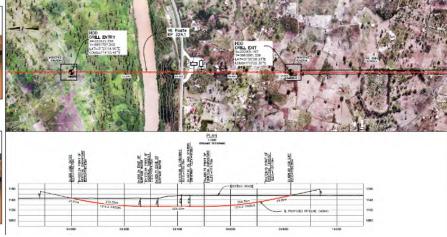
PIPELINE SPECIAL POINTS TWO RIVERS CROSSINGS BY HDD IN TANZANIA

HDD River Crossings (Horizontal Directional Drilling)



PRE-REAMING







HDD cumulated length 2060 m:

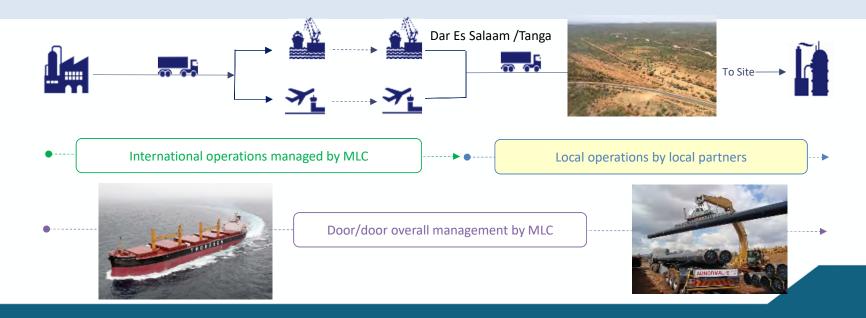
- (1) Kagera river 830 m
- (2) Sigi river 1230 m
- 40" casing
- Soil conditions validated by bore holes and resistivity surveys



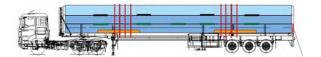
Main Logistics Contract (MLC) Transport of Company Items

Scope

- To transport Company and Company contractors items from suppliers factories out of country to final worksite in Tanzania and Uganda (Sea and land transports)
- To supply & manage temporary storage locations in Dar
- To perform the supply chain management including all cargo documentation management and customs out and in clearances
- To manage relevant fees, levies for transportation activities
- Services Contract







LOGISTICS LINEPIPES IN-COUNTRY ROAD TRANSPORT



Dar Es Salaam is the Main port of entry

- Import tonnage = 500,000 t
- Port capacity: circa 13 MT handled per year

Tanga Port to be considered for Terminal Construction

For LINE-PIPES alone

- 270,000 t
- 86,000 joints
- 9,555 truck trips (9 joints per truck)
- 20 trucks per day leaving port for 16months
- 160 trucks on the road at each time
- 1000 km to Coating Plant Round trip = 8 days

Globally 35 million vehicle-km expected

Road Safety Transportation is the EACOP Challenge.

→ Journey management, Day driving, Drivers selection and training as per international standards, Vehicles technical criteria and maintenance program and daily check list, IVMS, Zero tolerance policy (alcohol-drug) and zero accident objectives,



PROJECT ORGANISATION



EACOP - LOCATIONS



Dar Es-Salaam, TANZANIA



 EACOP Co. and Project Directions, Land & Social, HSE Co., Env. for Tanzania, EACOP Project Team (Construction, Logistics, PMT)

Kampala, UGANDA

 EACOP Co. Finance, Commercial, Legal, Land & Social, Env. for Uganda



London, UK

 Project Team and Project EPcm (Engineering, Procurement, Q-HSE, Ops)





EACOP LOCAL CONTENT IN TANZANIA



LOCAL CONTENT VISION & PILLARS

Vision

- Promote <u>economic development</u> and national industrialization.
- Implementing an industrial development plan
- Capitalize on the development phase to <u>build the capacity of the local</u> companies and Tanzania Citizen
- Drive the growth of the Tanzania Oil & Gas Industry in line with the objective of Tanzania for long term industrial development



Local Content Pillars

- 1. Employment & training
- 2. Goods & services
- 3. Capacity building & technology transfer





THE PETROLEUM (LOCAL CONTENT) REGULATION 5TH MAY 2017



Local Suppliers and Service Providers database (LSSP)



UNITED REPUBLIC OF TANZANIA
MINISTRY OF ENERGY
ENERGY AND WATER UTILITIES
REGULATORY AUTHORITY

TANZANIA LOCAL SUPPLIERS AND SERVICE PROVIDERS DATABASE

ISSN0856 - 034X

Supplement No. 17

05th May, 2017

SUBSIDIARY LEGISLATION

to the Gazette of the United Republic of Tanzania No. 18 Vol. 98 dated 18th May, 2017.

Printed by the Government Printer Dar es Salaam by Order of Government.

GOVERNMENT NOTICE NO. 197 published on 05/05/2017

THE PETROLEUM ACT (CAP. 392)

REGULATIONS

(Made under section 258)

THE PETROLEUM (LOCAL CONTENT) REGULATIONS, 2017

ARRANGEMENT OF REGULATIONS

PART I PRELIMINARY PROVISION

- Citation and Commencement.
- Application.
- Interpretation.

PART II LOCAL CONTENT OBJECTIVES

General Objectives.



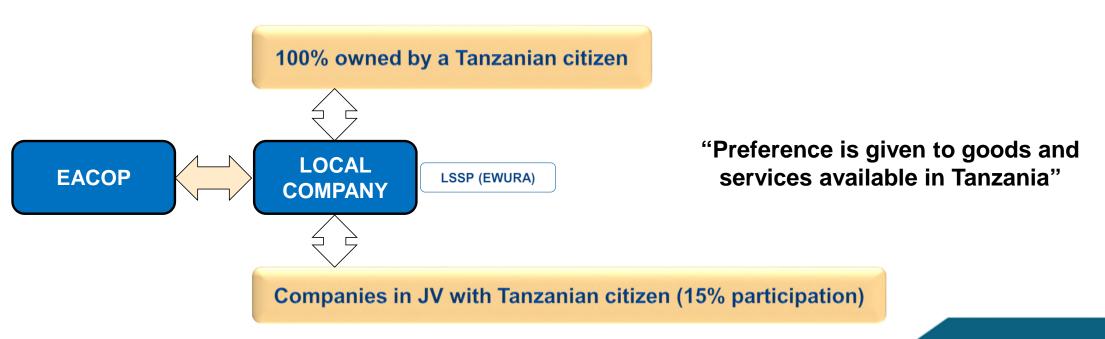
LOCAL COMPANY DEFINITION LOCAL CONTENT REGULATIONS 2017

"Local Company" definition:

"A company or subsidiary company incorporated under the Company Act,

which is 100% owned by a Tanzanian citizen or a company

that is in a joint venture partnership with a Tanzanian citizen or citizens whose participating share is not less than 15%"





LOCAL CONTENT - RESERVED CONTRACTS (HGA)

Following goods and services shall be provided by Tanzanian companies:

- transportation
- security
- o foods and beverages
- o hotel accommodation and catering
- o office supplies
- o fuel supply
- o land surveying
- Lifting equipment
- o locally available construction materials
- o civil works
- o communication services
- waste management





GOODS & SERVICES

Priority is given to available local goods and services on an open tendering



10% of technical bid evaluation in Local Content



Transparency & advertising are key in the procurement process

Local community must be involved in supply chain





Reserved contracts for Tanzanian citizens



EACOP – SOURCING PROCESS

Expression of Interest (EOI): Published in Tanzanian newspapers

Call for Tender (CFT): Issued to Selected Companies

Tender Evaluation Procedure: Criteria for Contractor selection (Tech./Contractual/Commercial)

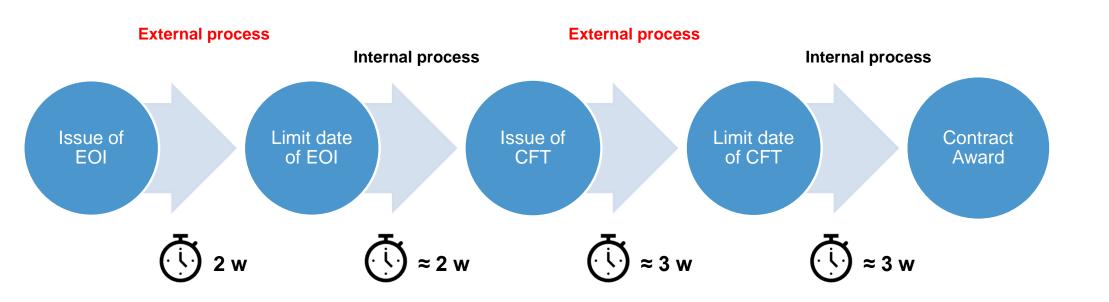
Contract Award



Whenever the difference in the proposals is < 5%, preference shall be given to bidders whose offers contain the highest commitment for National/Local Content.



GLOBAL TIMELINE OF PROCESS



Global timeline: average of 10 weeks



EACOP – SOURCING PROCESS ADVERTISING

Expression of Interest (EOI): Published in Tanzanian newspapers and EACOP website



Daily News



Habari Leo



Mwananchi



The Citizen



EACOP website

Eacop.co.tz



The Guardian



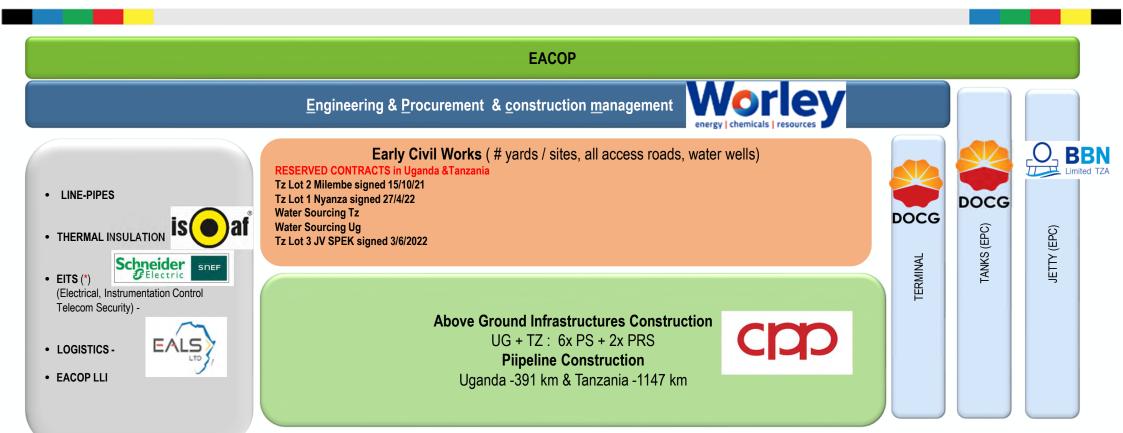
Nipashe



In response, Interested Companies shall express their interest



EACOP MAIN CONTRACTS





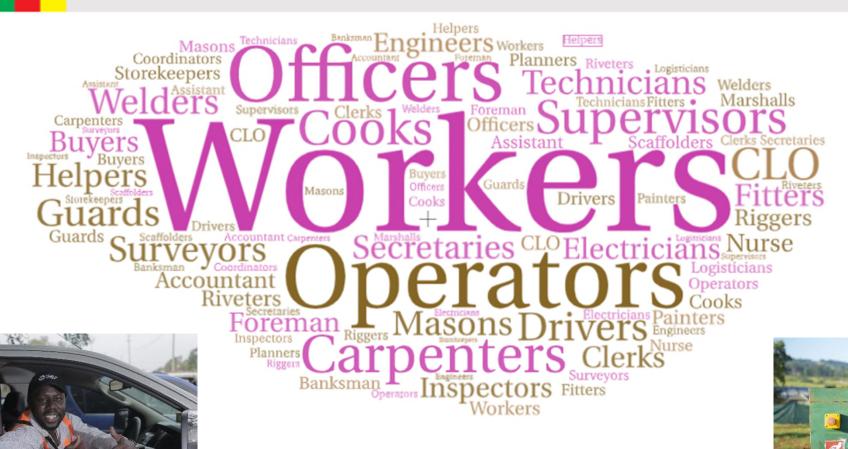
CONTRACTING FOR GOODS & SERVICES







EMPLOYMENT SKILLSETS







CONCLUSION HOW TO REACH OUT OPPORTUNITIES

NEWSPAPERS

10 DAILY NEWS FRIDAY, MAY 19, 2022 Four children reported found in Amazon 17 days after plane crash

REQUEST FOR EXPRESSION OF INTEREST FOR Contractor

Job Training; Technical Training of EACDP Operations and Maintenance Teams; Internal Mentonihip/Scholarship; Train-the-Trainer; Training Delivery at Specified Industry Cents

Ex-paramilitary leader testifies about assassinations in Colombia

INTERNATIONAL NEWS

Japan, UK renew

deploy in 2025

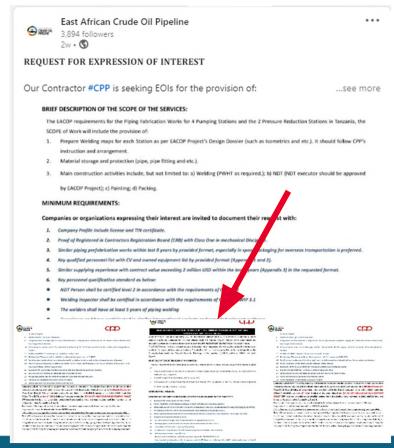


Proof of business make retion

(TCC) for the latest year available.

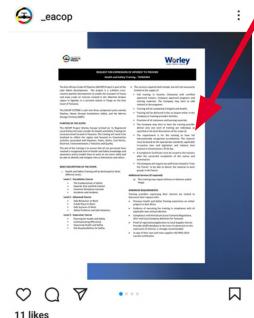
LINKEDIN





INSTAGRAM





_eacop REQUEST FOR EXPRESSION OF INTEREST

Our contractor Worley is seeking for companies in Tanzania and Uganda to provide the services in Health and Safety Training, Welding and Coating Inspector Training and Certification.

For more information follow the link: https://bit.ly/EACOP_WORLEY



CONCLUSION HOW TO REACH OUT OPPORTUNITIES WEBSITE

https://eacop.com/



To see contact details, job opportunities and call for expression of interest, please click on each contractor below for details.





Click Here



Click Here



Click Here



Click Here



Click Here



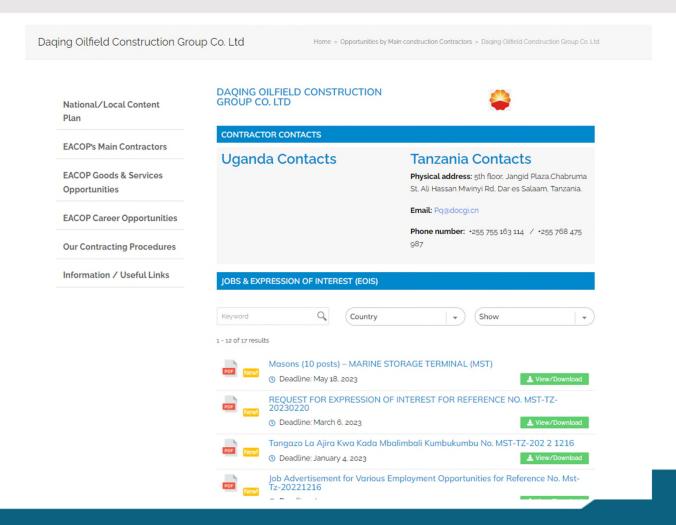
Click Here





CONCLUSION HOW TO REACH OUT OPPORTUNITIES WEBSITE

Opportunities & Contact details











ASANTE WEBALE THANK YOU MERCI 謝謝

www.eacop.co.tz