



Ghana Showcase

14TH FEBRUARY 2023

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SAIPEC 2023 HOSTED BY PETAN



- **Country Profile**
- **Overview of Ghana's Upstream Oil and Gas Industry**
- **Fiscal & Regulatory Regime**
- **Blocks On Offer**
 - ✓ Deep Water Cape Three Points Block
 - ✓ Expanded Shallow Water Tano Block
 - ✓ Offshore South West Tano Block
 - ✓ Offshore Cape Three Points South Block
 - ✓ Shallow Water Cape Three Points Block
 - ✓ South West Saltpond Block
- **Why Invest in Ghana**
- **Conclusion**



- Ghana is a peaceful democracy in West Africa
- Total land area is 238,533 sq. km
- Mainstay of Economy - Agric, Service, Mfg and Petroleum



Overview of Ghana's Upstream Oil and Gas Industry

FPSO KNK



FPSO JEAM



FPSO JAK



- 3 offshore basins and 1 onshore basin with active E&P activities.
- 12 Operators with 14 Petroleum Agreements
- Jubilee Field (2007) became the first commercial discovery, production commenced in December 2010
- 29 discoveries have been made after 2007
- 3 Producing fields – Jubilee, TEN and SGN
- Average Daily Production of **150,000bbl/d** of oil and **380mmscf/d** of gas
- Availability of Infrastructure – 3 FPSOs, pipelines, Gas Processing Plant, etc.
- Proven reserves in excess of **1035 mmbbl** and **1.72 Tcf gas**
- About **63,000 sq. km** of offshore acreage is open for E&P Activities
- Robust Regulatory Framework.
- Competitive Fiscal Regime.

01

Royalties

- Rate of royalty ranges from:
 - 4% - 12.5% of gross oil production
 - 3% - 10% of volume of gas exported
- Royalties are determined by **competitive bidding** or through **direct negotiation**

02

Corporate Income Tax

- The corporate income tax rate is **35%**
- Ring-fenced on Field/Development and Production Area basis.
- 5-year loss carried over
- 100% recovery of OPEX and abandonment cost in the same period
- Exploration and development costs capitalized and recovered over 5years

03

State Participation

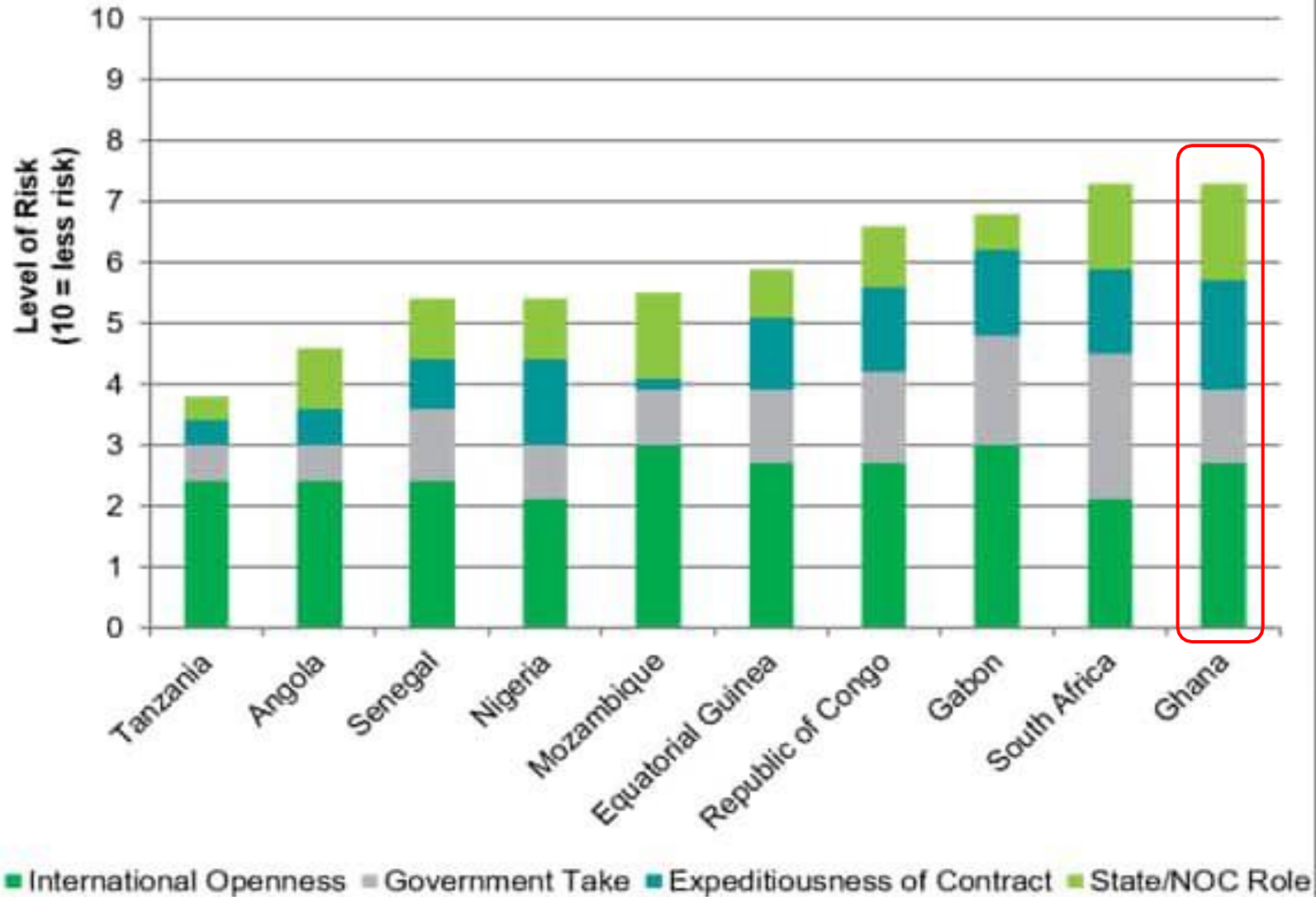
- Minimum **Initial Participating Carried Interest of 15%** non-reimbursable for exploration and development phases
- Additional Participating Paying Interest **OPTION** after declaration of commerciality up to a pre-agreed percentage

04

Additional Oil Entitlement

- Captures part of windfall profit
- AOE entitles the State to a share of contractor's crude oil if the post-tax rate of return exceeds specified thresholds.

IHS Markit PEPS Oil & Gas Risk Hydrocarbon Sector Entry scores for selected Sub-Saharan African countries

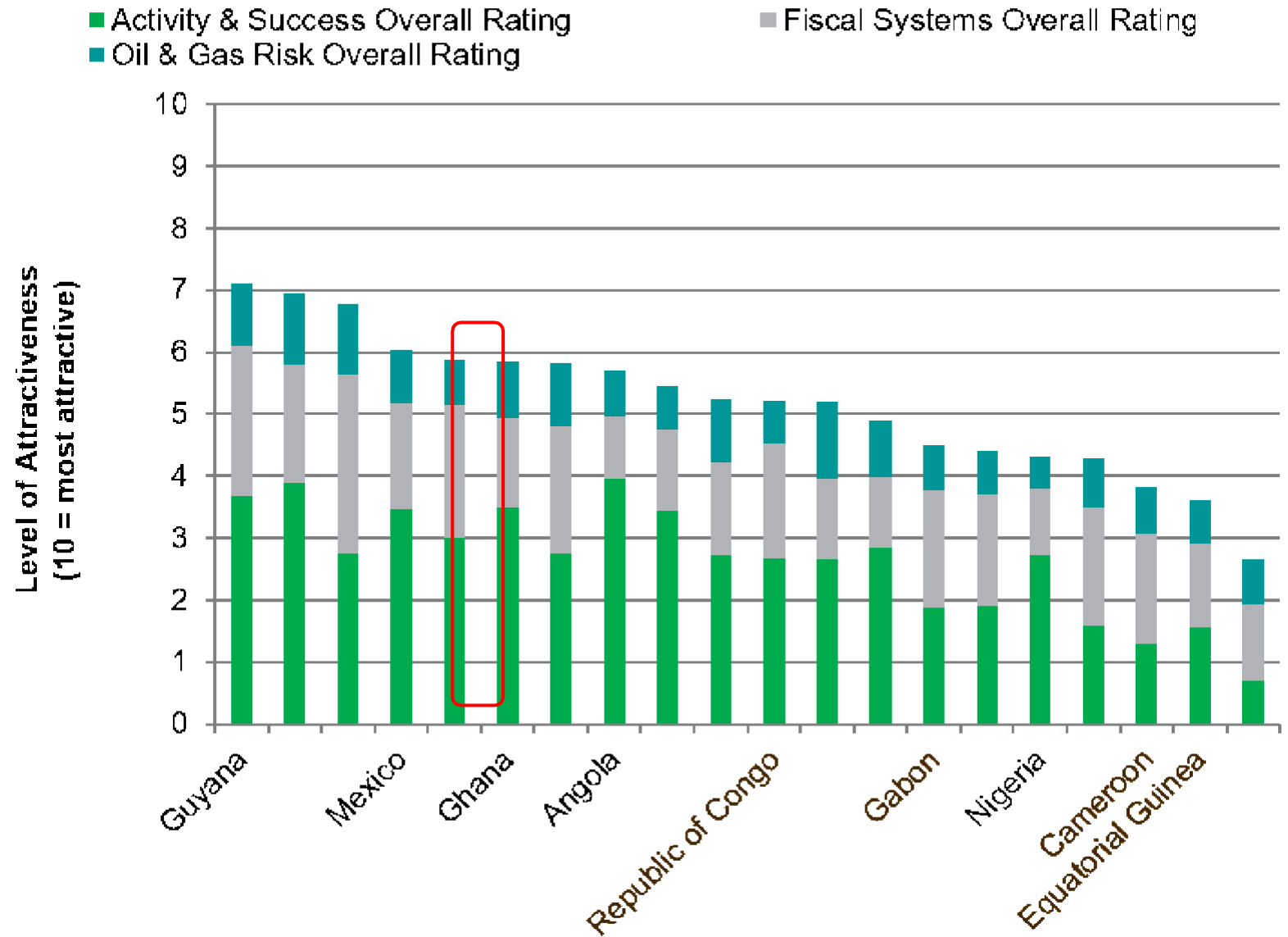


Source: IHS Markit PEPS Oil & Gas Risk

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- IHS Markit's (now S&P Global) Petroleum Economics and Policy Solutions ranks Ghana ahead of its peers in sub-region in terms of entry into the oil and gas industry
- Areas considered include:
 - *International Openness*
 - *Government Take*
 - *Expeditiousness of Contract*
 - *State/NOC Role*
- Ghana ranks at par with only South Africa with a score of above 7.

PEPS E&P Attractiveness Ratings: Mature West African producers in context with selected peers



- IHS Markit's (now S&P Global) Petroleum Economics and Policy Solutions ranks Ghana ahead of its peers in sub-region in terms of E&P Attractiveness
- Areas rated include:
 - *Activity & Success*
 - *Risks*
 - *Fiscal System*

To ensure the efficient conduct of upstream petroleum operations and all allied activities for the benefit of Ghanaians, Government has adopted a systematic approach in the development of upstream regulations and guidelines

LAWS

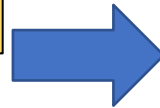
The 1992 Constitution of the Republic of Ghana

Petroleum (Exploration and Production) Act, 2016 Act 919

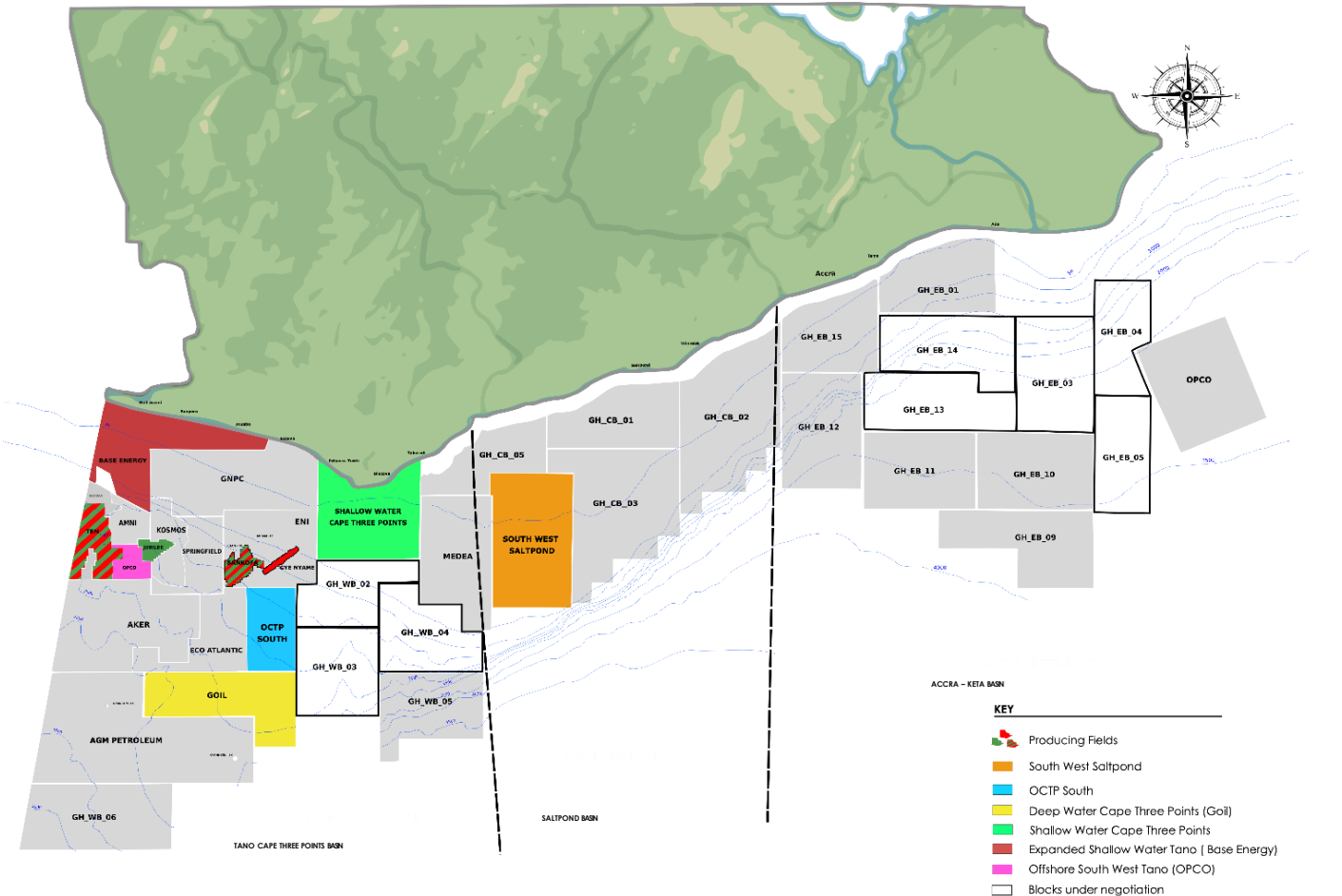
Ghana National Petroleum Corporation Law, (1983) PNDCL 4

Income Tax Act (2015), Act 896

Petroleum Revenue Management Act, 2011 (Act 815)



- Petroleum (Local Content and Local Participation) Regulations, 2013 (L.I. 2204)
- Petroleum (Exploration and Production)(Measurement) Regulations, 2016 (L.I. 2246)
- Petroleum (Exploration and Production)(Health Safety and Environment Regulations) Regulations, 2017 (L.I. 2258)
- Petroleum (Exploration and Production)(Data Management) Regulations, 2017 (L.I. 2257)
- Petroleum (Exploration and Production)(General) Regulations, 2018 (L.I. 2359)



NEW ACREAGES

Available via Direct Negotiation

- Offshore Cape Three Points South – **755 sq.km**
- Shallow Water Cape Three Points – **1508 sq.km**
- South West Saltpond – **2050 sq.km**

FARM-IN

- Deep Water Cape Three Points – **1474 sq.km**
Operated by Goil Offshore Ghana Ltd.
- Expanded Shallow Water Tano – **1500 sq.km**
Operated by Base Energy Ghana Ltd.
- Offshore South West Tano – **175 sq.km**
Operated by OSWT & EK Operating Company (EC)

Deep Water Cape Three Points Block



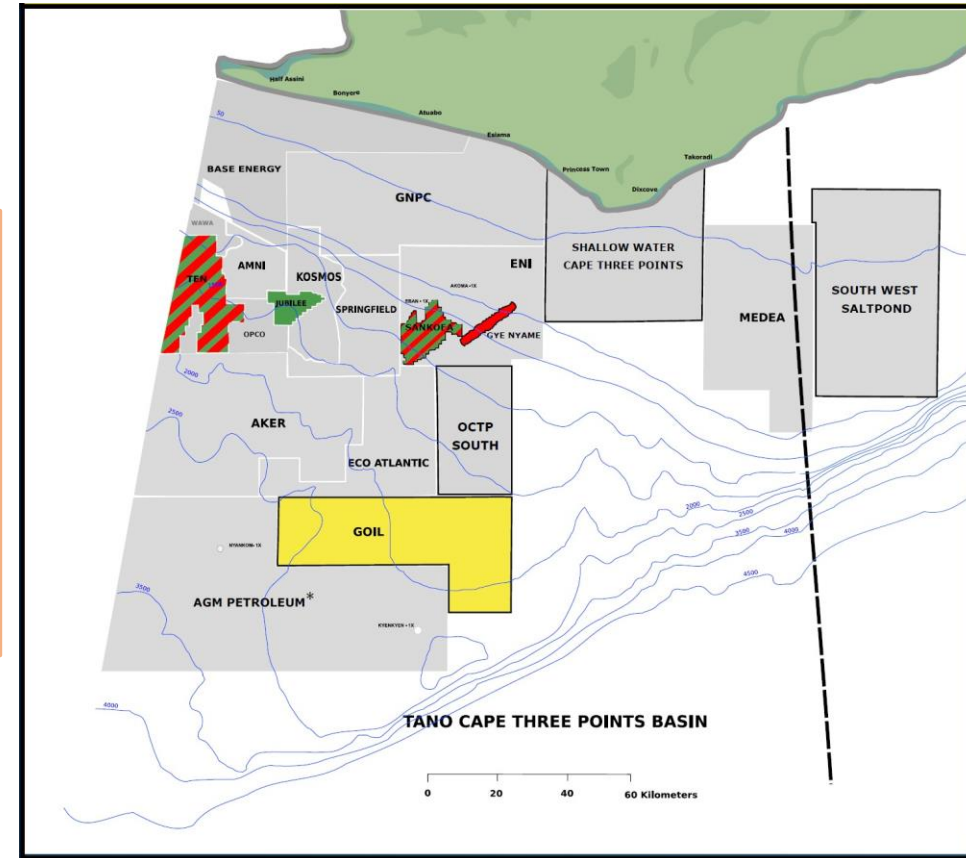
Play Type: Cretaceous

Block Location: 150km from shore

Block Size: 1,474 km²

Water Depth: 2000 – 2500 m

Trapping System: Combined structural and stratigraphic

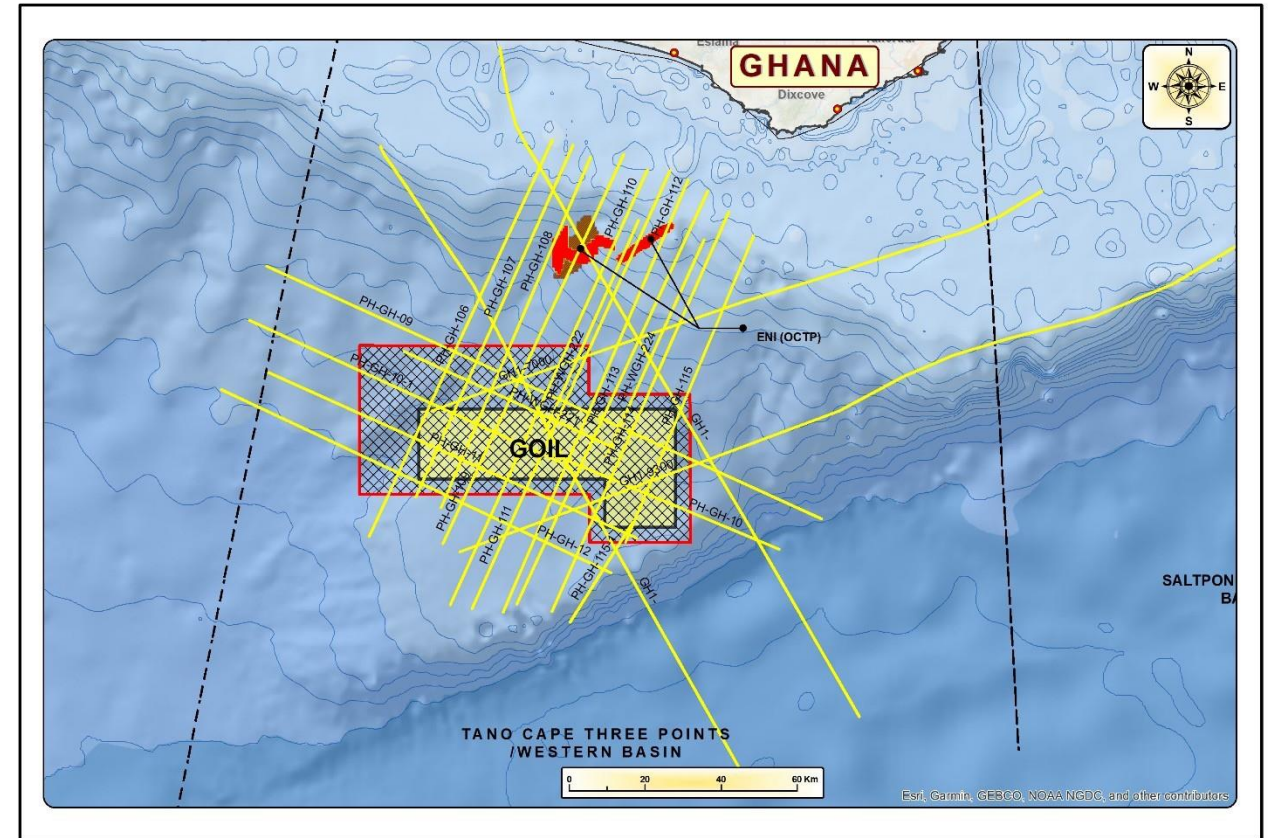


Data Coverage

- 5 Offset Wells: Dzata – 1x, Dzata-2A, Nyankom-1x, Pecan South & Lynx-1x
- 2D Seismic Data: various vintages
- 3D seismic Data: 3392sq. km
- Well & Commissioned Reports

Nearby Fields and Facilities

- Located South of Eni's Sankofa and Gye Nyame Field, Akoma Gas condensate Discovery and Eban Oil Discovery, and east of the Pecan Field.



Expanded Shallow Water Tano Block

Block Location: North of Tullow's Jubilee and TEN Fields

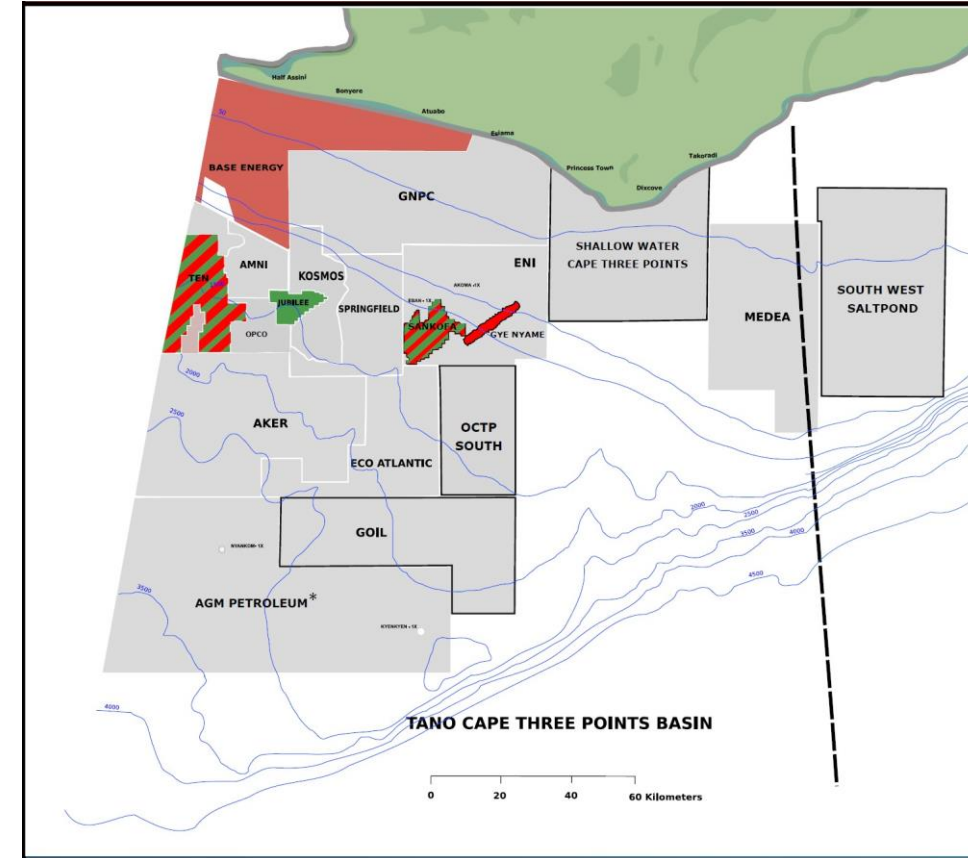
Block Size: 1500 sq. km

Water Depth: 0 – 200 m

Play Type: Channelized sandstones and rotated fault block in the syn-rift of the Cretaceous.

Source Rock: Cenomanian-Turonian and Albian

Trapping System: Stratigraphic and Combination

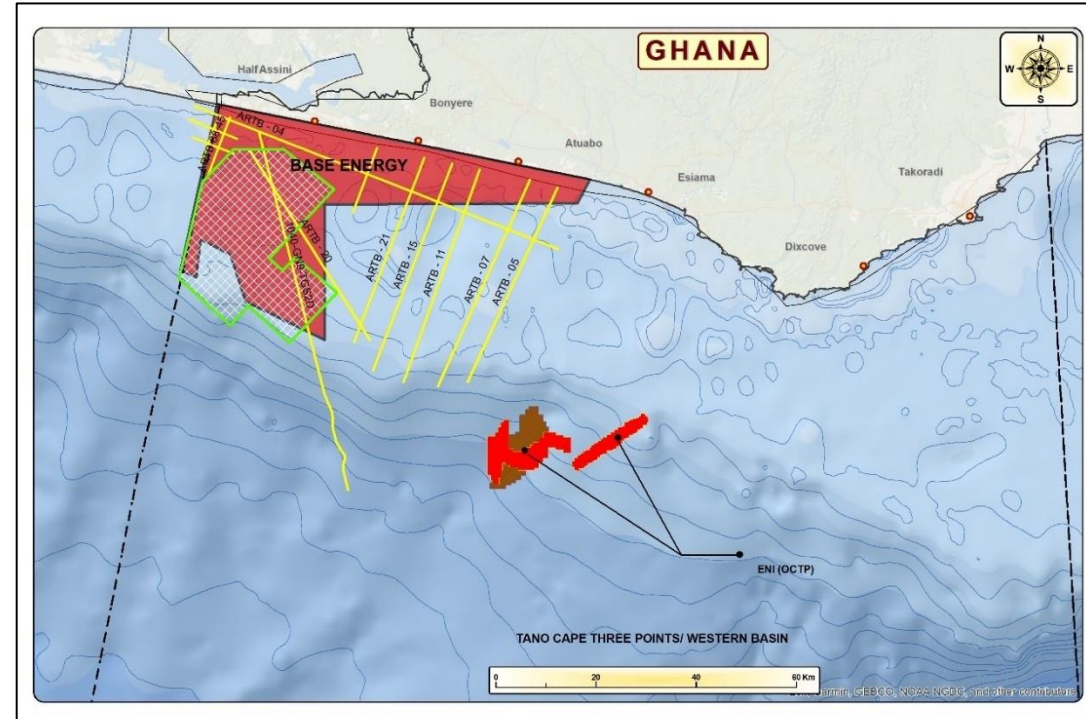


Data Coverage

- 17 Wells
- 2D Seismic Data: various vintages
- 3D Seismic Data: 880 sq km (1999)
- Well data & Commissioned Reports

Nearby Fields and Facilities

- There are three (3) discovered fields in the block; North, South and West Tano.
- Located north of Tullow's Jubilee and TEN Oil Field
- The field is 38 km from the Atuabo Gas Plant.





Block Location: East of the TEN field

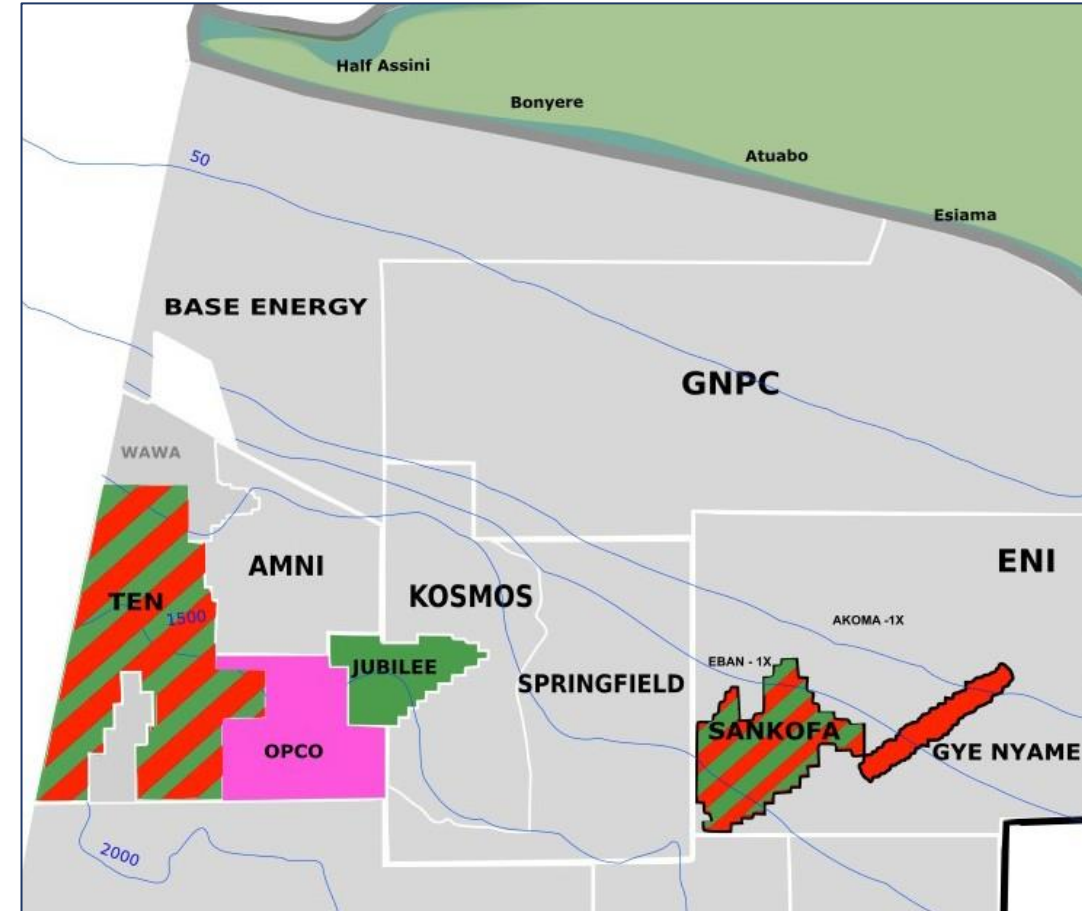
Block Size: About 175 sq.km

Water Depth: 1300m

Play Type: Cretaceous Turbidites

Source Rock: Cenomanian, Turonian, Albian

Trapping System: Stratigraphic, Structural & Combination



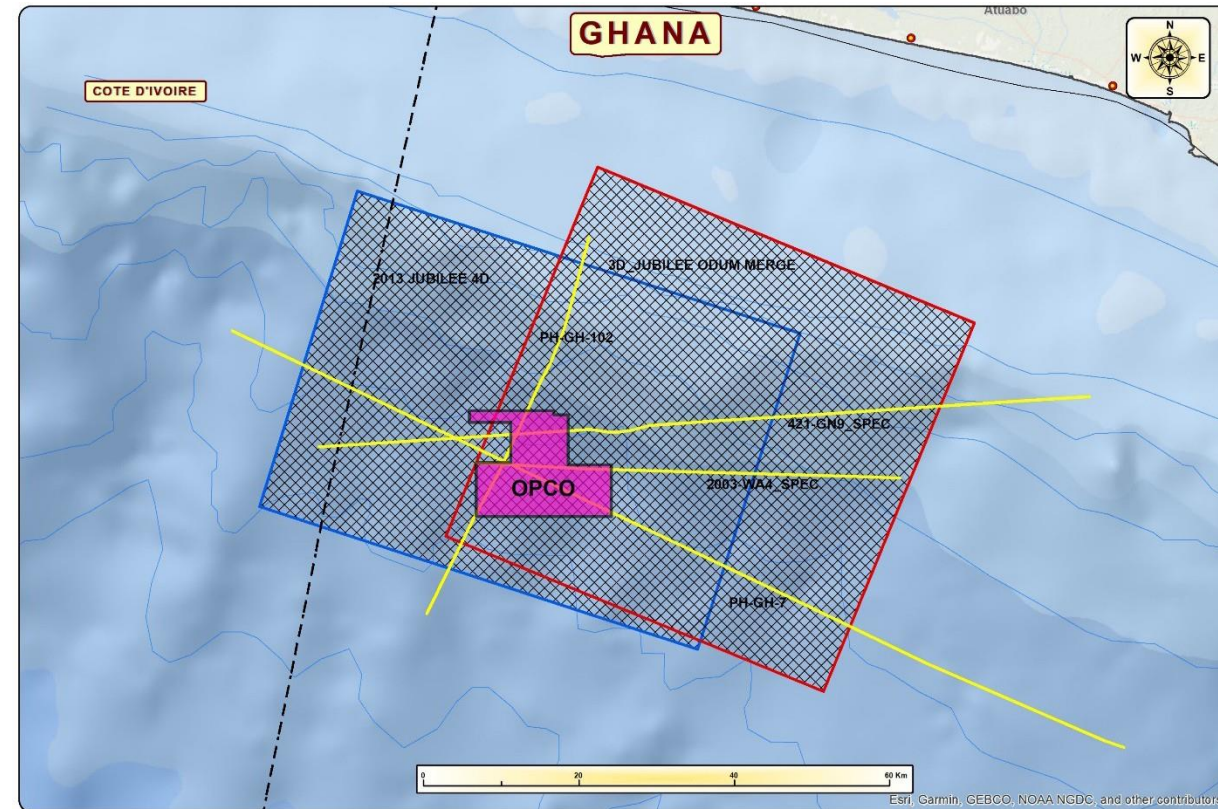


Data Coverage

- Several Offset Wells
- 2D Seismic Data: several vintages
- 3D Seismic Data: Full coverage over various vintages
- Well & Commissioned Reports

Nearby Fields and Facilities

- Located in between the Jubilee field and TEN Field and north of the DWTCTP block with several discoveries including Pecan, Pecan North, Hay, Paradise, Almond, Beech among others.



Offshore Cape Three Points South Block

Block Location: South of Eni's Sankofa & Gye Nyame Field

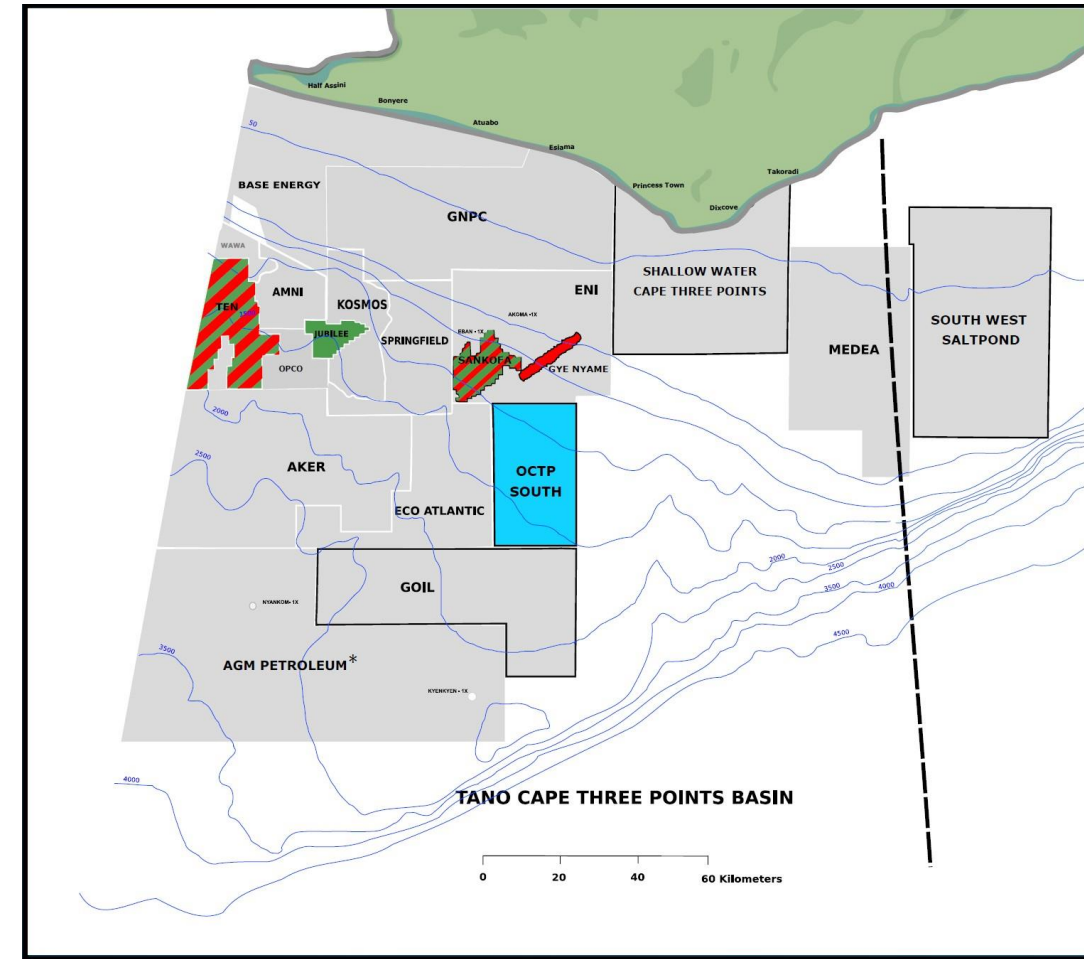
Block Size: About 755sq.km

Water Depth: 1000-2500m

Play Type: Lower & Upper Cretaceous

Source Rock: Cenomanian, Turonian, Albian

Trapping System: Stratigraphic and Combination

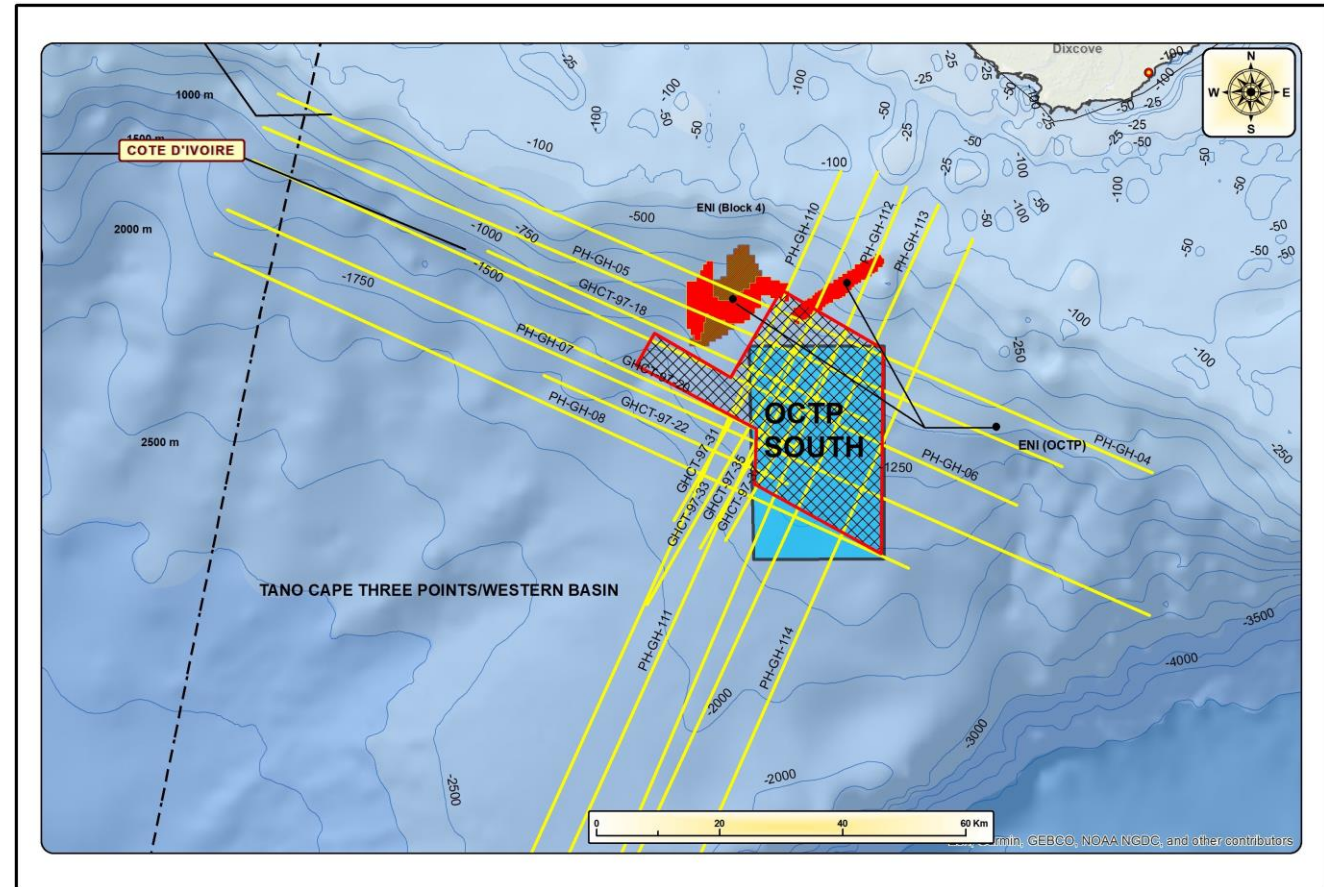


Data Coverage

- 1 Exploratory Well: South Dixcove-1X
- Offset well : Asaase Ye Duru-1x
- 2D Seismic Data: various vintages
- 3D Seismic Data: 655sq km
- Well & Commissioned Reports

Nearby Fields and Facilities

- Located south of Eni's Sankofa and Gye Nyame Field, Akoma Gas condensate Discovery and Eban Oil Discovery.
- Located east of Aker Energy's Pecan Oil Field
- The Sankofa and Gye Nyame Field is produced with an FPSO
- A 63km gas pipeline links the FPSO to an onshore receiving facility



Shallow Water Cape Three Points Block

Block Location: Sankofa- Gye Nyame Field

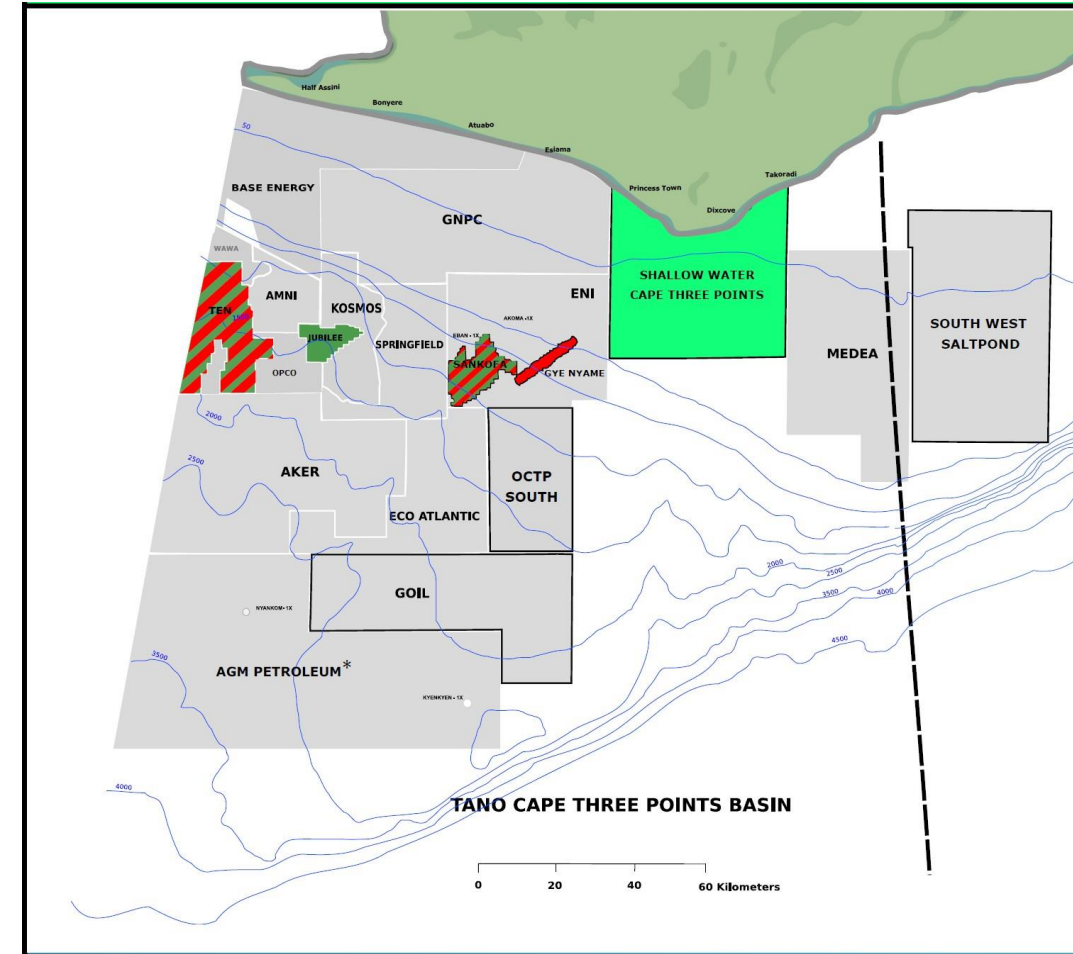
Block Size: 1 508sq. km

Water Depth: 0– 200m

Play Type: Lower & Upper Cretaceous

Source Rock: Cenomanian, Turonian, Albian

Trapping System: Stratigraphic & Combination

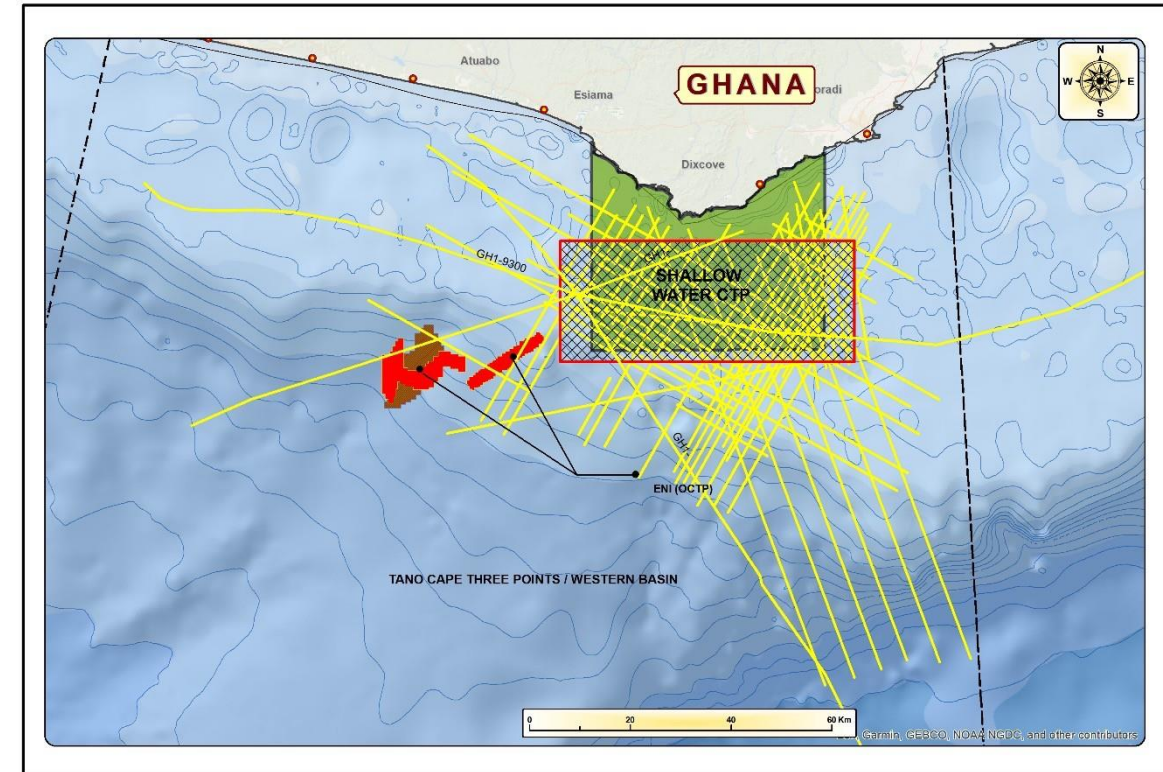


Data Coverage

- 4 Exploratory Wells: CTP-1, Takoradi 6-1, GH5-A1, NIP
- 2D Seismic Data: various vintages
- 3D Seismic Data: 1250sq km
- Well & Commissioned Reports

Nearby Fields and Facilities

- Located northeast of Eni's Sankofa and Gye Nyame Field, Akoma Gas condensate Discovery and Eban Oil Discovery.
- Located east of Aker Energy's Pecan Oil Field
- The Sankofa and Gye Nyame Field is produced with an FPSO
- A 63 km gas pipeline links the FPSO to an onshore receiving facility



Block Location: East of the ECTP (Medea) Block

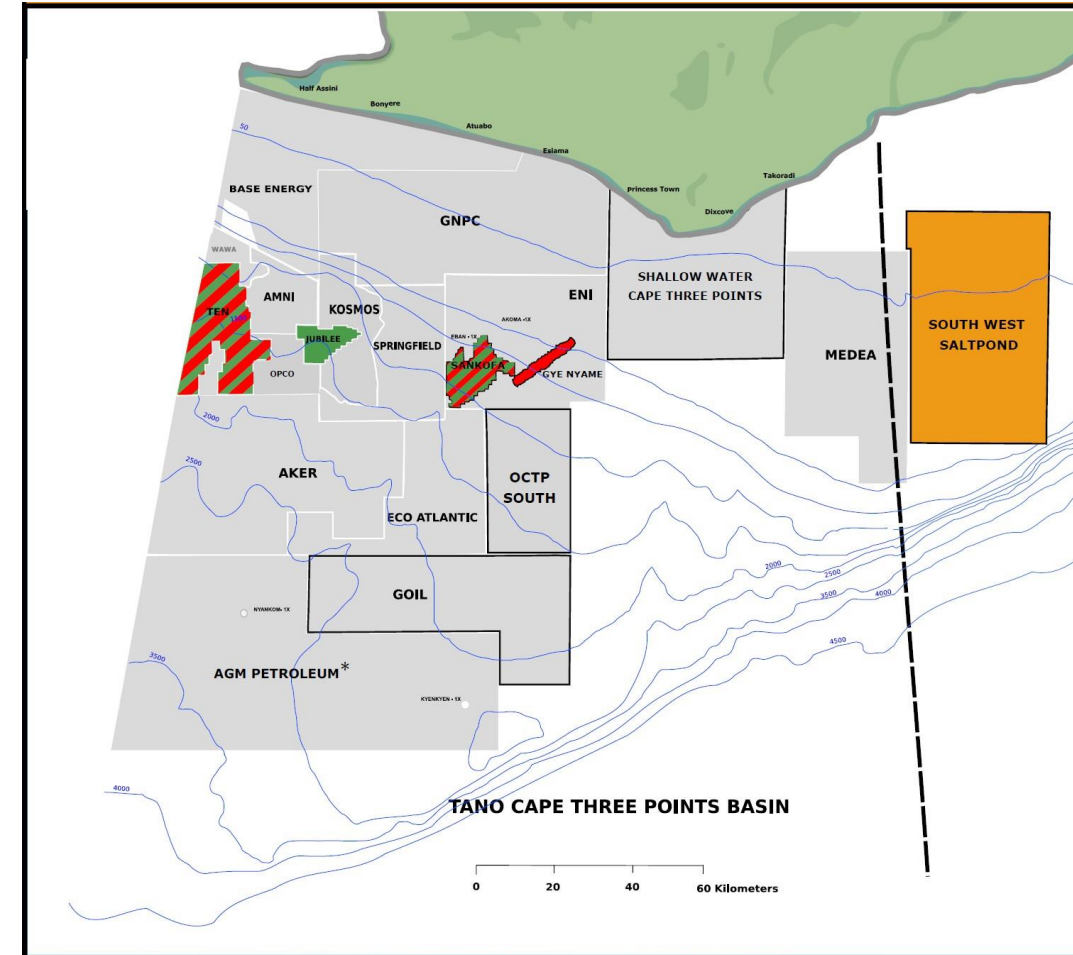
Block Size: About 2050 sqkm

Water Depth: 30-100m

Play Type: Devonian

Source Rock: Devonian

Trapping System: Structural

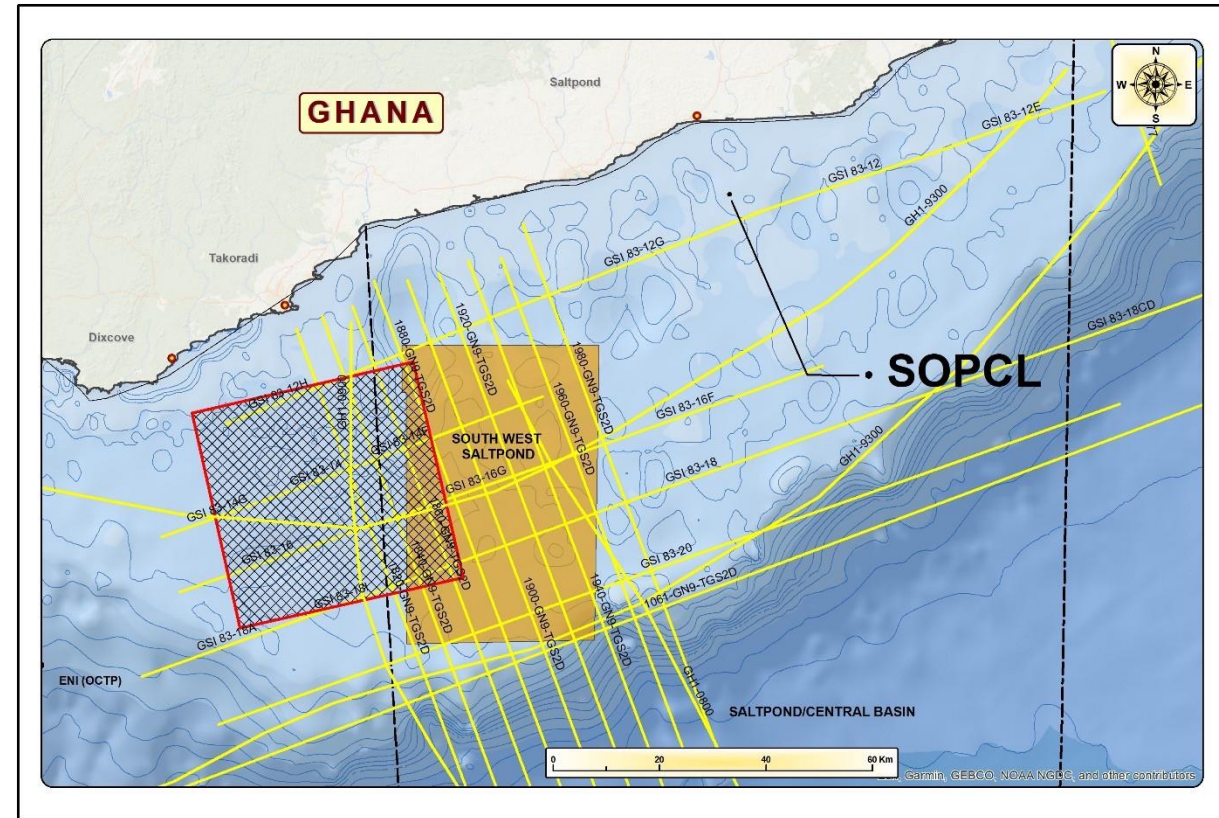


Data Coverage

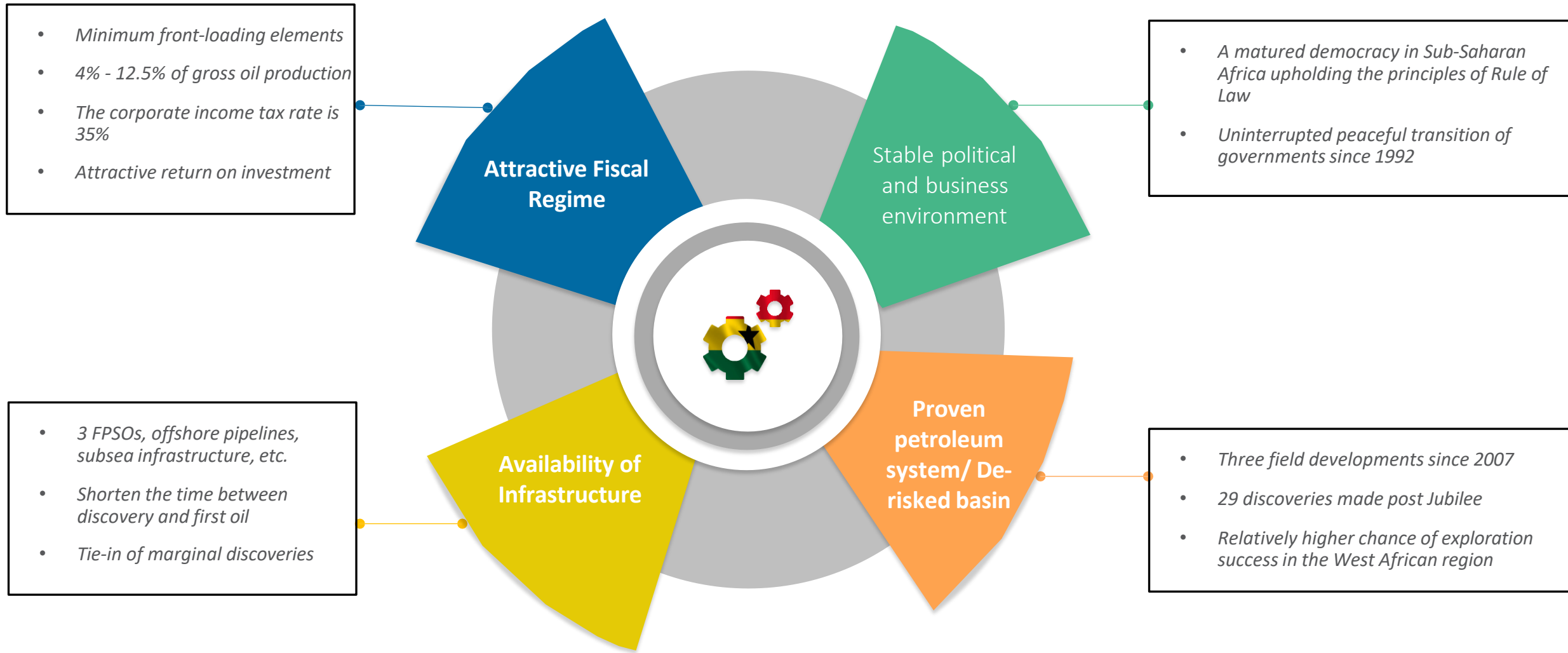
- 2 Exploratory Wells: Takoradi 11-1 and Shama 9-1
- 2D Seismic Data: various vintages
- Well & Commissioned Reports

Nearby Fields and Facilities

- Located east of Eni's Sankofa and Gye Nyame fields, Akoma Gas condensate Discovery and Eban Oil Discovery.



Why Invest in Ghana's Upstream Petroleum Sector?



Availability of support infrastructure

Well defined regulatory framework

- Peaceful Democratic West African country.
- Reliable Investment destination for International Oil Companies
- Proven Petroleum System in the offshore environment – Three FPSOs producing oil and gas from Jubilee, TEN and Sankofa Fields.
- Very attractive Fiscal Regime.
- Robust Regulatory Regime.
- Availability of Offshore Blocks for Direct Negotiation.



For digital copies of relevant information relating to upstream petroleum opportunities in Ghana

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Website: www.energymin.gov.gh
Email : info@energymin.gov.gh

THANK YOU

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