



**A PRESENTATION ON NIGERIA'S NATIONAL SITUATION WITH OFFSHORE CARBON STORAGE -
AT THE INTERNATIONAL WORKSHOP ON OFFSHORE CO2 STORAGE -19-21
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Presented By

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MARITIME NIGERIA



NIGERIA is a coastal State with about 853 kilometers coastline. The country's Exclusive Economic Zone (EEZ) covers a total area of approximately 315,950 nautical square kilometers. With a vast environment subtending enormous resources, the Nigerian maritime sector has remained largely untapped, yet it has a variety of investment potentials cutting across shipbuilding/repairs, freight forwarding, training and maritime service industries etc.



There is a vast network of navigable and potentially navigable rivers, lakes and creeks, transverse more than 3,000 kilometers of inland waters. Nigeria remains the economic hub of West Africa and shares in its coastline including the rich Gulf of Guinea. She is a key destination of the world's major shipping lines and logistics service providers.

COASTAL AND MARINE ENVIRONMENT OF NIGERIA





NATIONAL IMPERATIVE CCS

- ▶ National policy on environment
- ▶ EIA ACT 1992
- ▶ Sectorial guideline on EIA
- ▶ Merchant shipping Act
- ▶ Merchant shipping act sea dumping regulation 2012
- ▶ NIMASA act
- ▶ NOSDRA act
- ▶ Regulatory MDAS
- ▶ FEDERAL MINISTRY OF ENVIRONMENT
- ▶ NIMASA
- ▶ DPR
- ▶ NOSDRA



PROMPTS FOR CO₂ STORAGE IN NIGERIA

- ▶ **Gas flare down policy with obvious impact of flare to man and the environment especially in the oil producing areas. Nigeria stated to be the largest emitter of CO₂ in Sub-saharan Africa(Ikeme,2008).;ranked 44th by International energy Agency(IEA) for emitting about 80.51 million metric tons of CO₂ annually(Yelebe et al.2015)**
- ▶ **Image laundering apparatus for IOCs tagged unfriendly to the environment in the public opinion**
- ▶ **Enhancement of drilling**
- ▶ **Signatory to London Convention/Stakeholders NTF**

- ▶ sights of flare in the Niger Delta region of Nigeria



GEOGRAGHICAL AREAS CONSIDERED CONT'D

Oil and Gas piplines

States in Niger Delta
Region

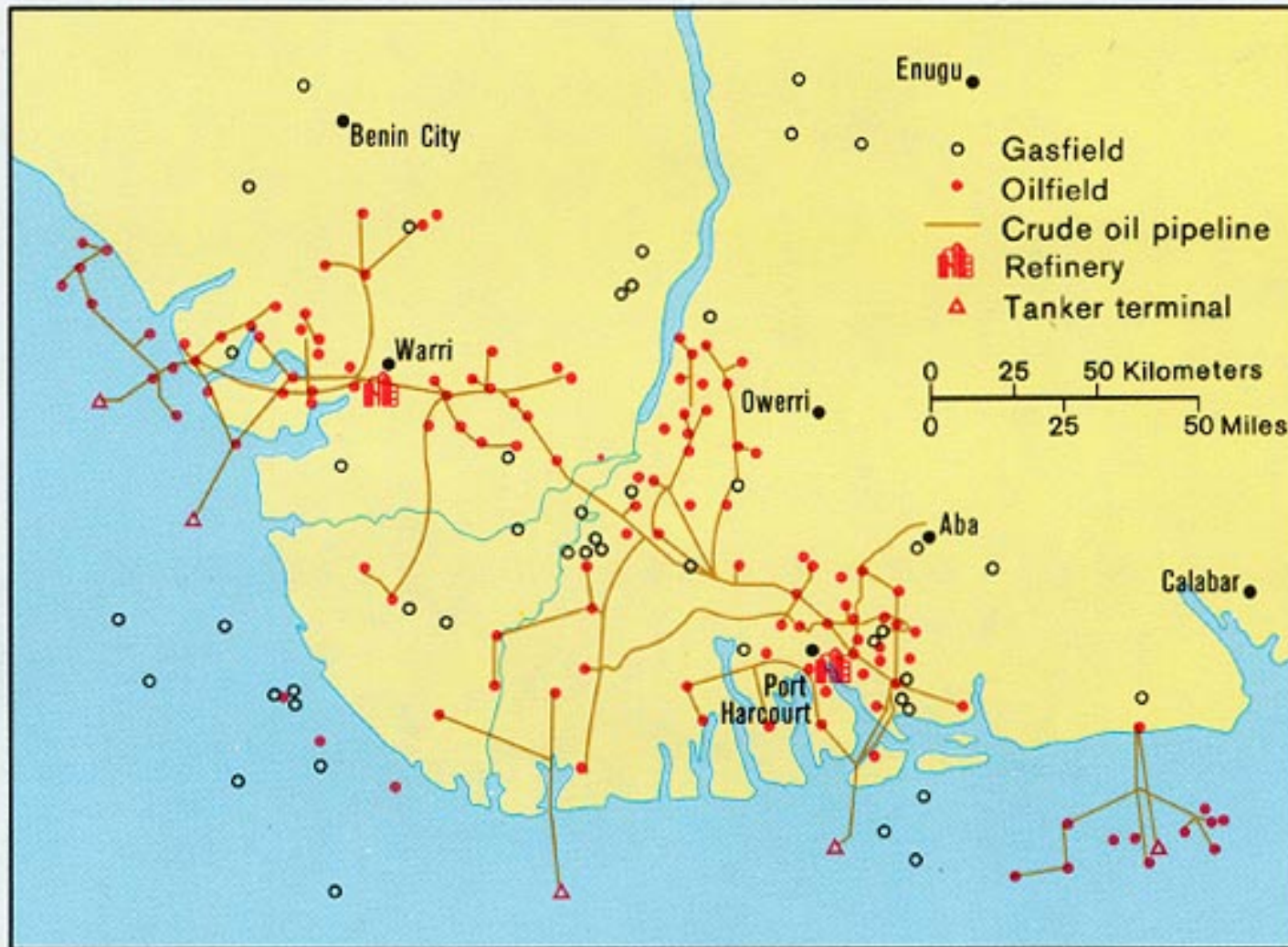


GEOGRAGHICAL AREAS CONSIDERED CONT'D

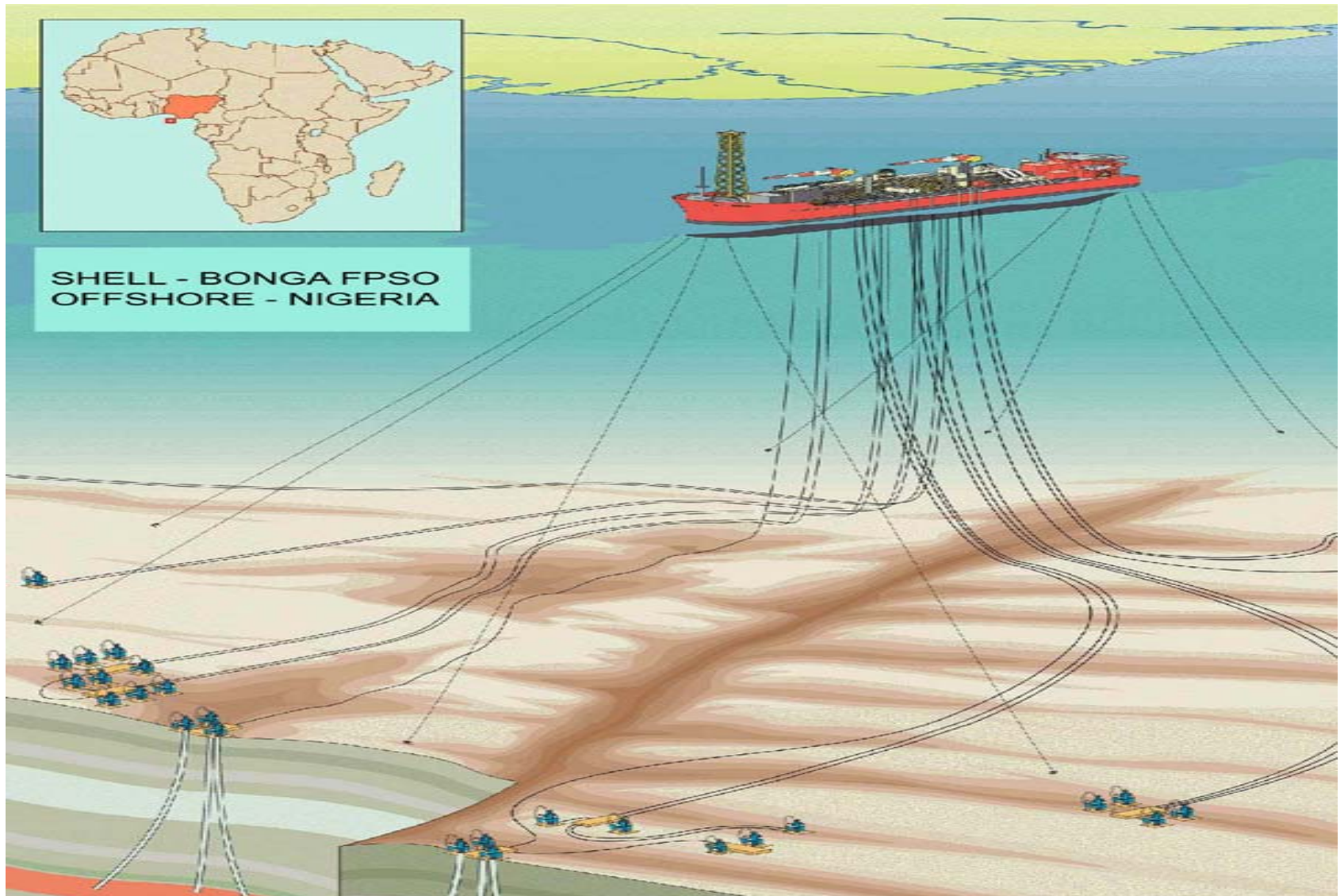


Geographical areas considered Cont'd

Gas and Oil



GEOGRAGPICAL AREAS CONT'D

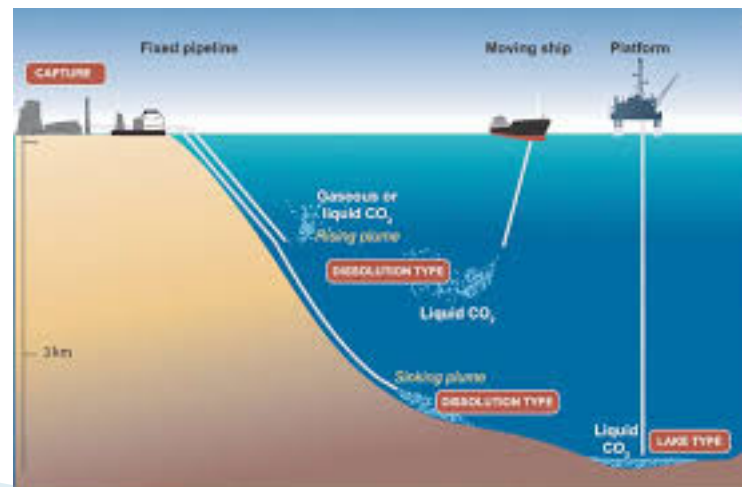


NETWORK OF INFRASTRUCTURE FOR GAS GATHERING



TRANSPORTATION MEANS

- ▶ Ships
- ▶ pipes



PROJECTION OF CO2 STORAGE/POTENTIAL BENEFITS BEBENEFIT IMPACT

- ▶ **Nigeria has a goal of reducing greenhouse gas emission by at least 25% in 2020 according to the Federal ministry of Environment in the National economic and Development study(NEEDS) for climate change in Nigeria 2010.**
- ▶ **CCS in Nigeria is likely to be measured in \$billions with the potential of creating 100,000 jobs/ skill acquisition (et al 2015)**
- ▶ **Reduction of health impact from flaring**
- ▶ **Reduction of carbon foot print of Nigeria**

INDEGINOUS SKILL ACQUISITION IN GAS GATHERING

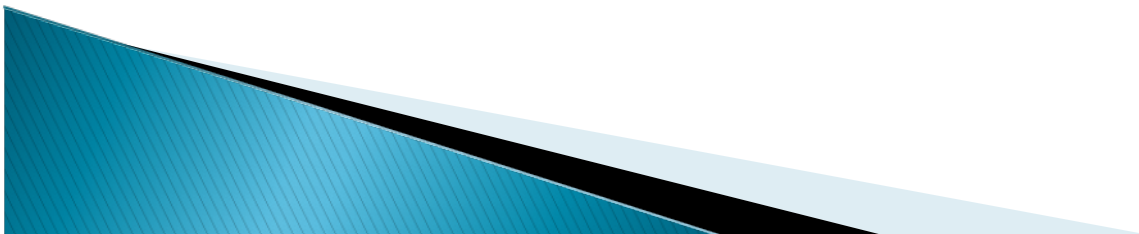


CHALLENGES

- ▶ **Need for a “one-stop-shop” data base repository for CCS**
- ▶ **Need to establish a comprehensive procedure implementation of EMP of EIA studies on CCS projects by Regulators and its interpretation and application in monitoring such projects.**
- ▶ **Knowledge gap on real time technical aspects of CCS by all stakeholders including Regulators.**

CHALLENGES CONT'D

- ▶ **lack of co-ordinated effort in making, implementation and enforcement of related instrument of intervention.**
- ▶ **lack of general awareness on CCS etc**



CHALLENGES CONT'D

- ▶ **lack of adequate regulatory instrument;**
- ▶ **lack of co-ordinated effort in making, implementation and enforcement of related instrument of intervention.**
- ▶ **lack of general awareness on CCS and the need to enforce the permitting system with a legally binding instrument eg: the permitting system of London protocol(1996)**

GOING FORWARD

- ▶ GLOBAL DRIVERS OF CCS TO;
- ▶ Link up and get more involving with
- ▶ London protocol secretariat, IMO, London
- ▶ UN.GEASMP secretariat
- ▶ International sea bed authority
- ▶ Use regional coastal and marine environment outfits eg the Abidjan convention.

GOING FORWARD

- Stakeholders sensitization through a step-down-programme based on the current workshop
- Collaboration with line Regulators and stakeholder
- National training on the implementation and enforcement of the provisions of CCS
- Survey of all the offshore CCS sites in Nigeria
- Health of the ocean from CCS point of view
- Development of mechanism/guideline for administration of CCS



APPRECIATION!!!!

- ▶ THANK YOU FOR THE OPPORTUNITY TO BE PART OF THIS NETWORK

- ▶ THANK YOU FOR YOUR ATTENTION