PETROSEN

SENEGAL SEDIMENTARY BASIN

Offshore Petroleum Potential

ASDEA - Décembre 202

Exploration work since 1952

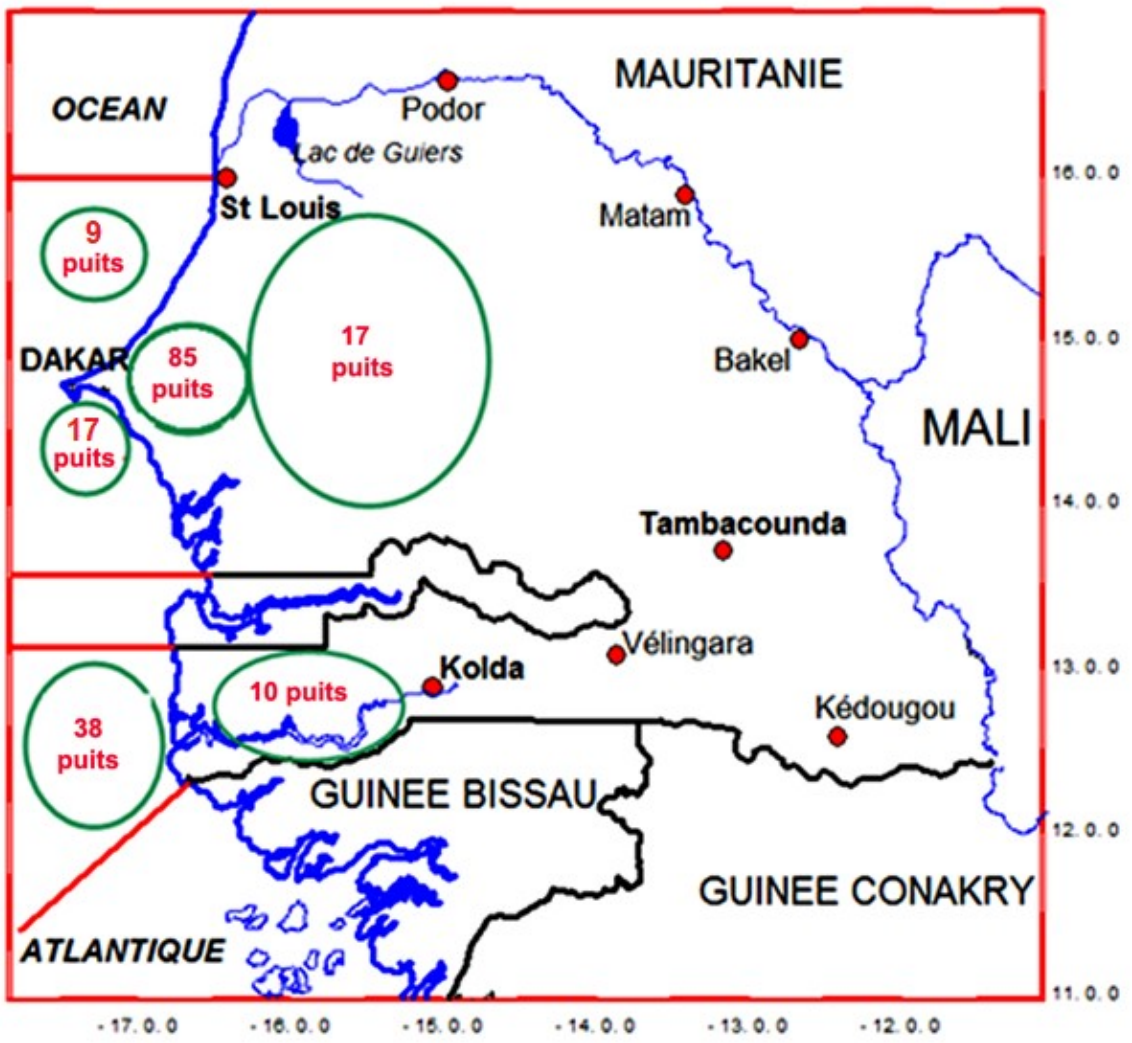
Seismic Acquisition

- 61767 km of 2D seismic
- 62 239 km² of 3D seismic

Exploration Wells

- A total of 176 exploration, appraisal and development wells **(most of the wells are drilled in the Dakar/Thies area and offshore south)**

➢ **The basin remains under explored**



Discoveries

- **Diam Niadio in 1961**

Small oil and gas fields in the Maastrichtian section

- **Dome Flore & Gea in 1967**

About 1 billion barrels of heavy oil in the Oligocene limestone

- **Gadiaga in 1976 / 1997**

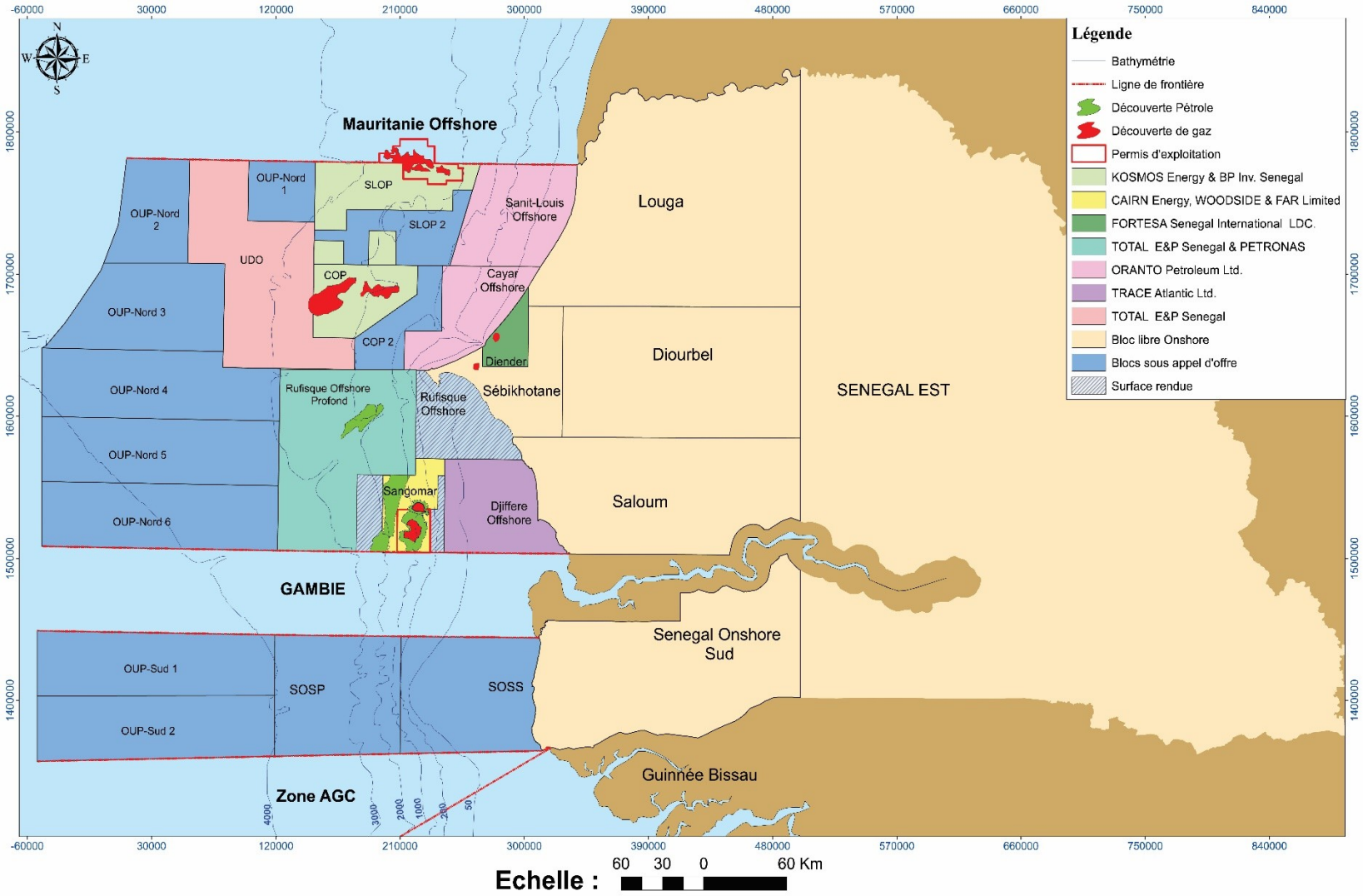
Gas reserves in Campanian and Senonian sandstones.

- **Sangomar Offshore Profond in 2014, 2017**

4 oil & gas discoveries in the Cenomanian & Albian.

- **Saint Louis & Cayar offshore Profond in 2015, 2016, 2017**

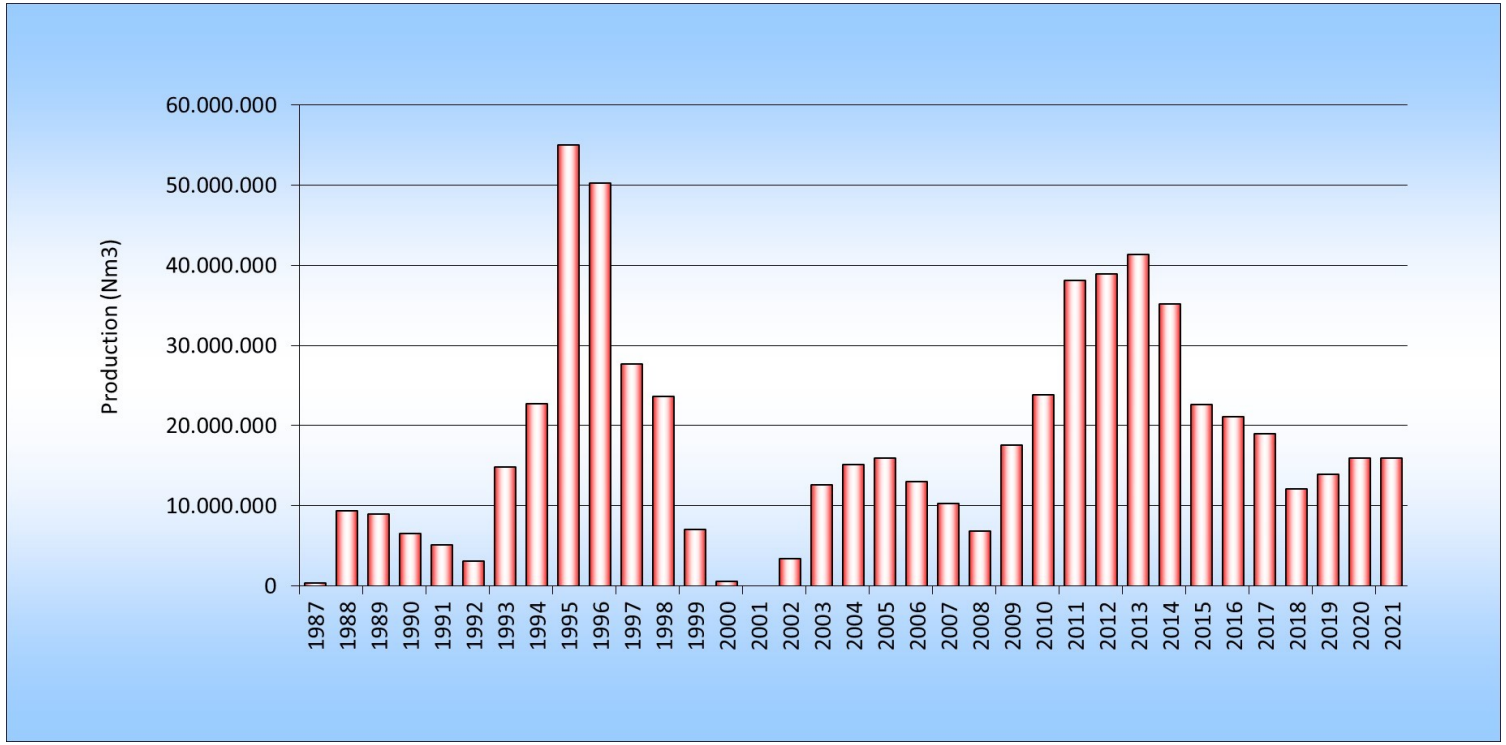
3 great gas discoveries in the Cenomanian & Albian

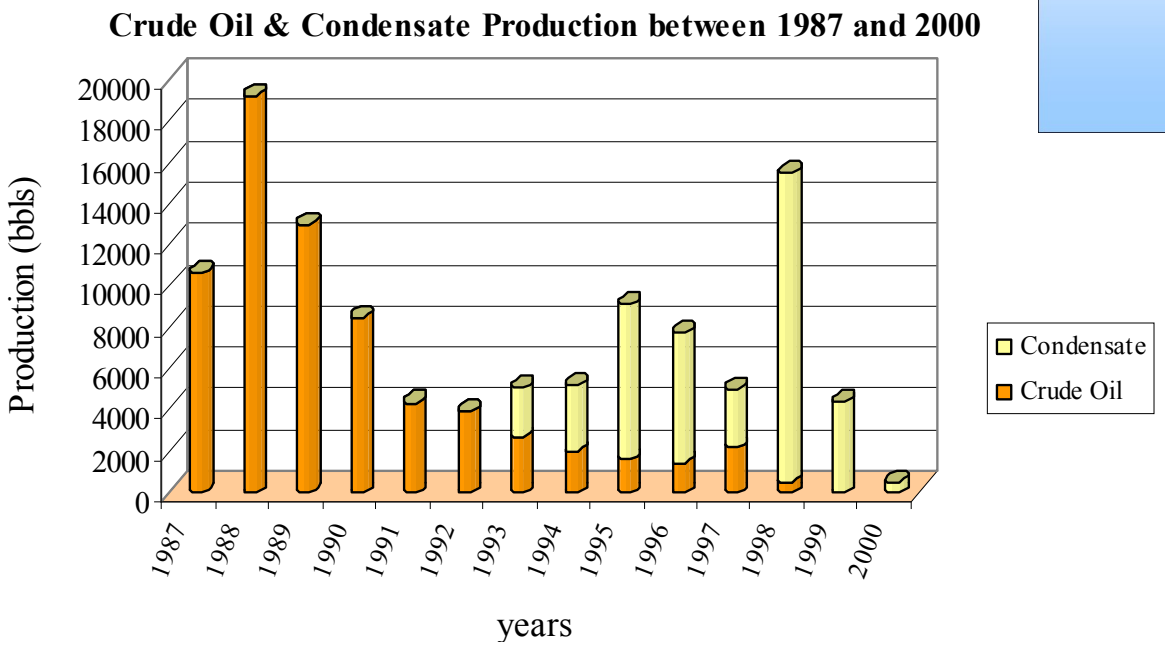


SENEGAL EMERGENT

Production

- 62.500 barrels of crude oil (34° API)
- 35.600 barrels of condensate





- Diam Niadio : 235 000 000 Nm3 of natural gas (8.8 BCF)
- Gadiaga/Sadiaratou : about 393 000 000 Nm3 of natural gas (about 15 BCF)

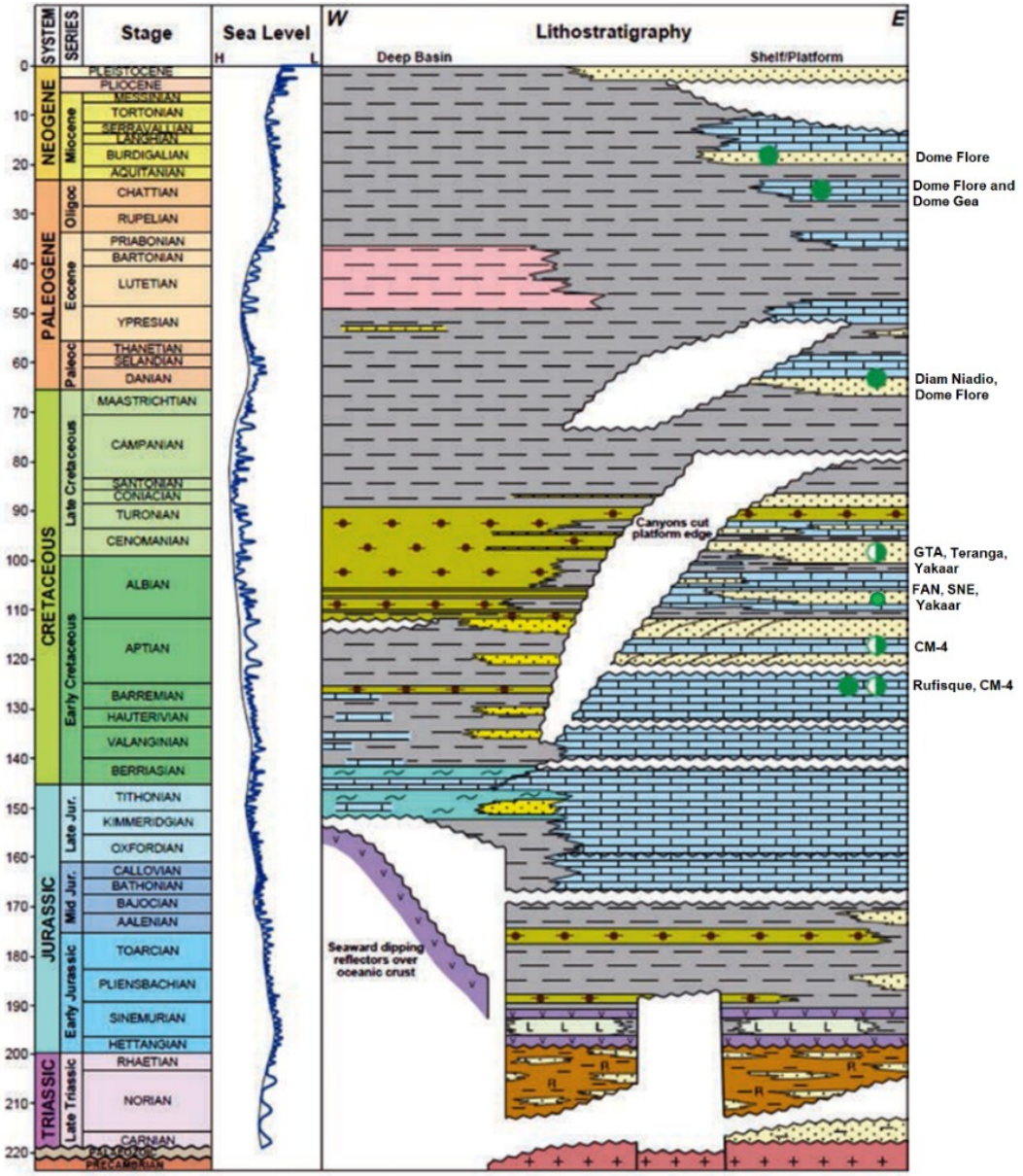
Offshore Potential : Reservoirs and Sources Rocks

Proven reservoirs:

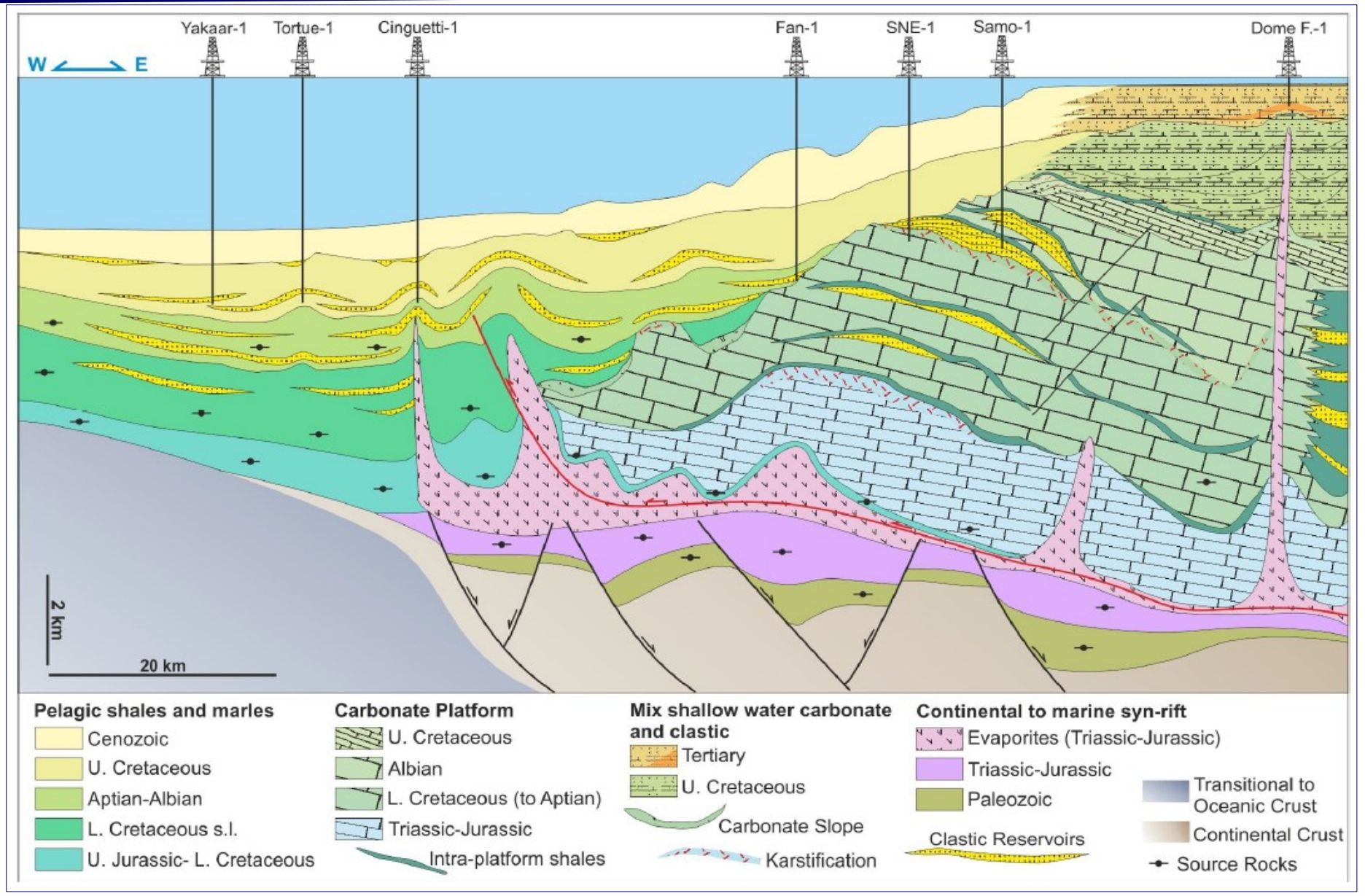
- Miocene and Oligocene (Dome Flore and Dome Gea;
- Maastrichian (Diam Niadio and Dome Flore);
- Lower Senonian (Gadiaga/Sadiaratou);
- Cenomanian (GTA, Teranga, Yakaar);
- Albian (FAN, SNE, Yakaar)

Proven Source Rocks:

- Cenomanian/Turonian
- Albian
- Jurassic?



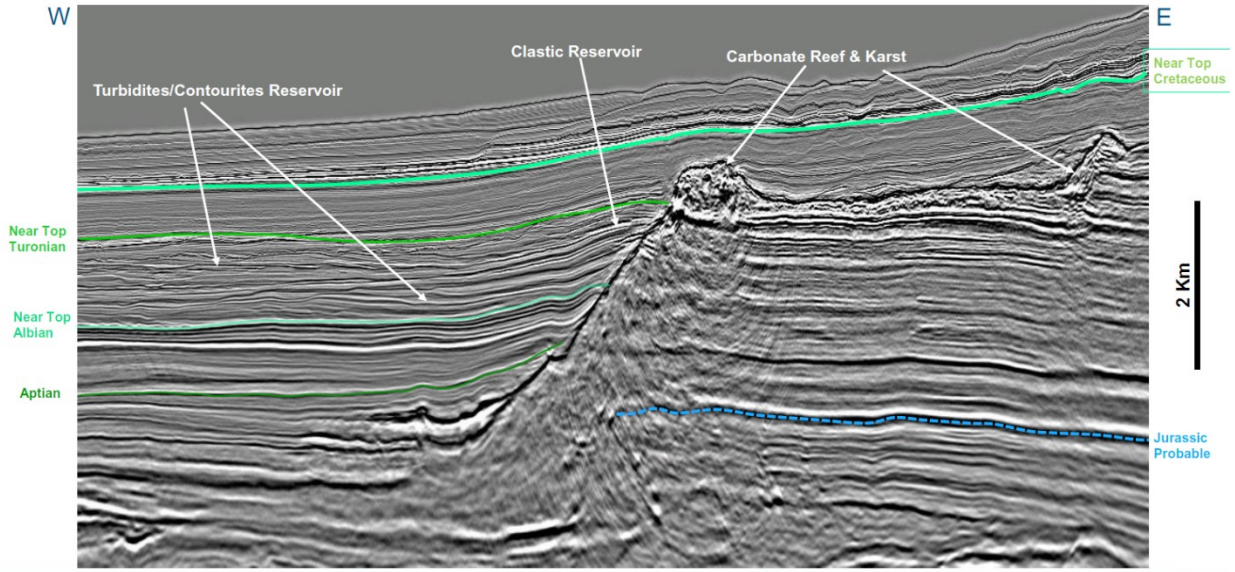
Offshore Potential : Play

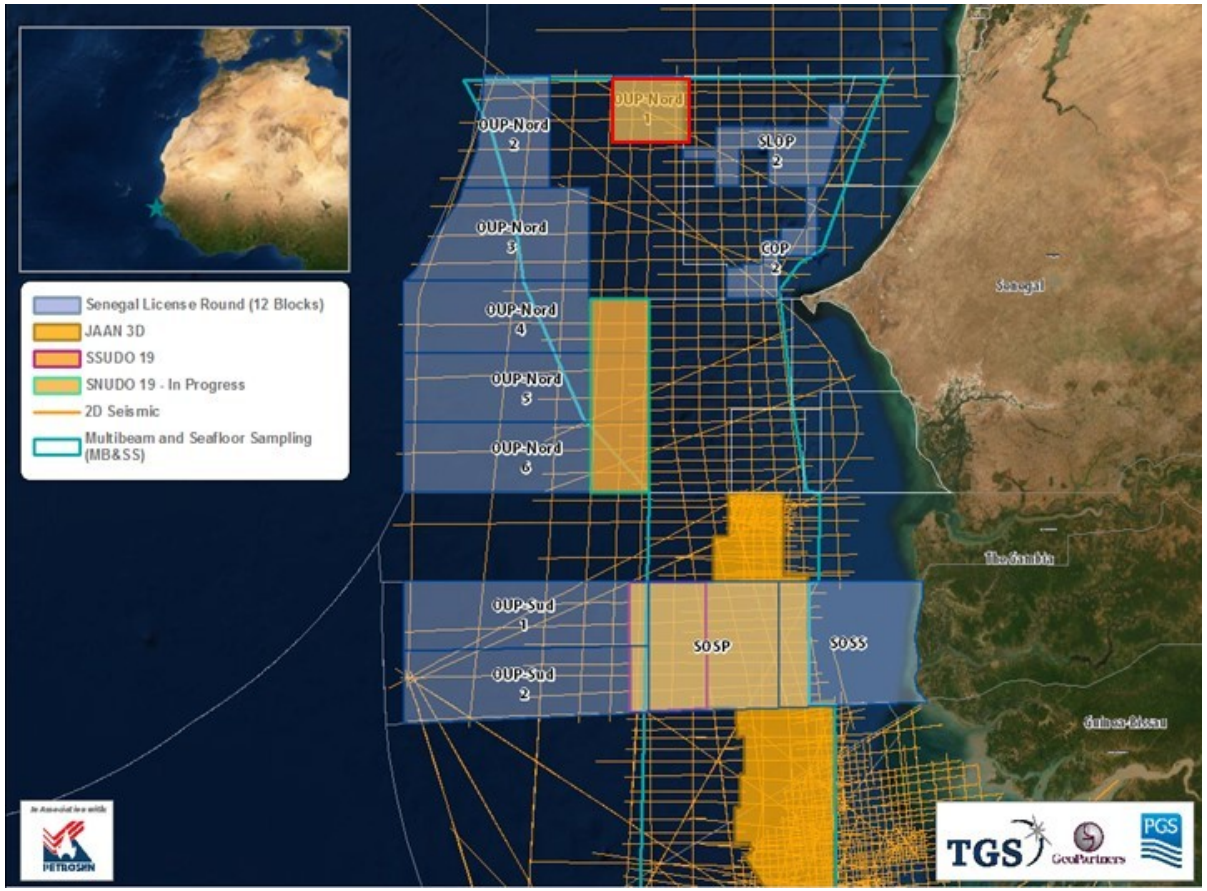


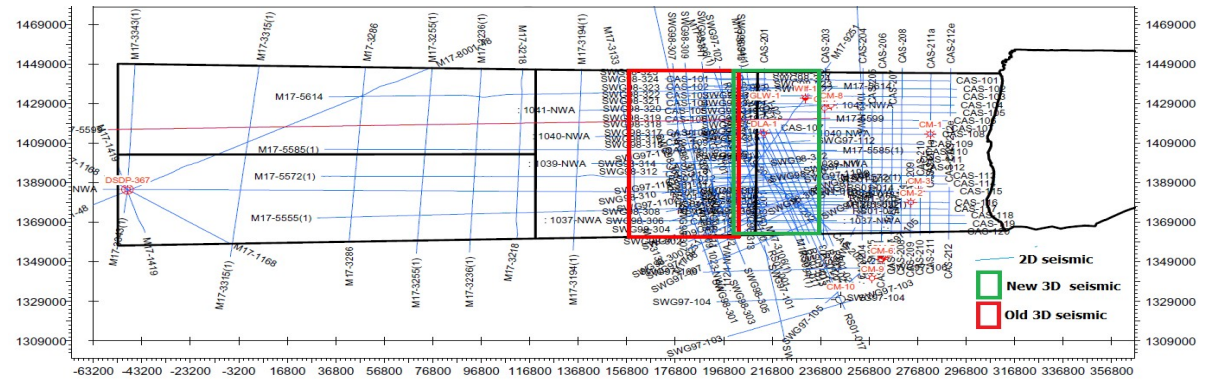
Available Data

- Regional 2D (about 14 000 Km) and 3D (about 28 000 Km2) multiclient seismic data
- Plus additional 2D and 3D proprietary seismic data

Example of Jaan 3D seismic







Available Data

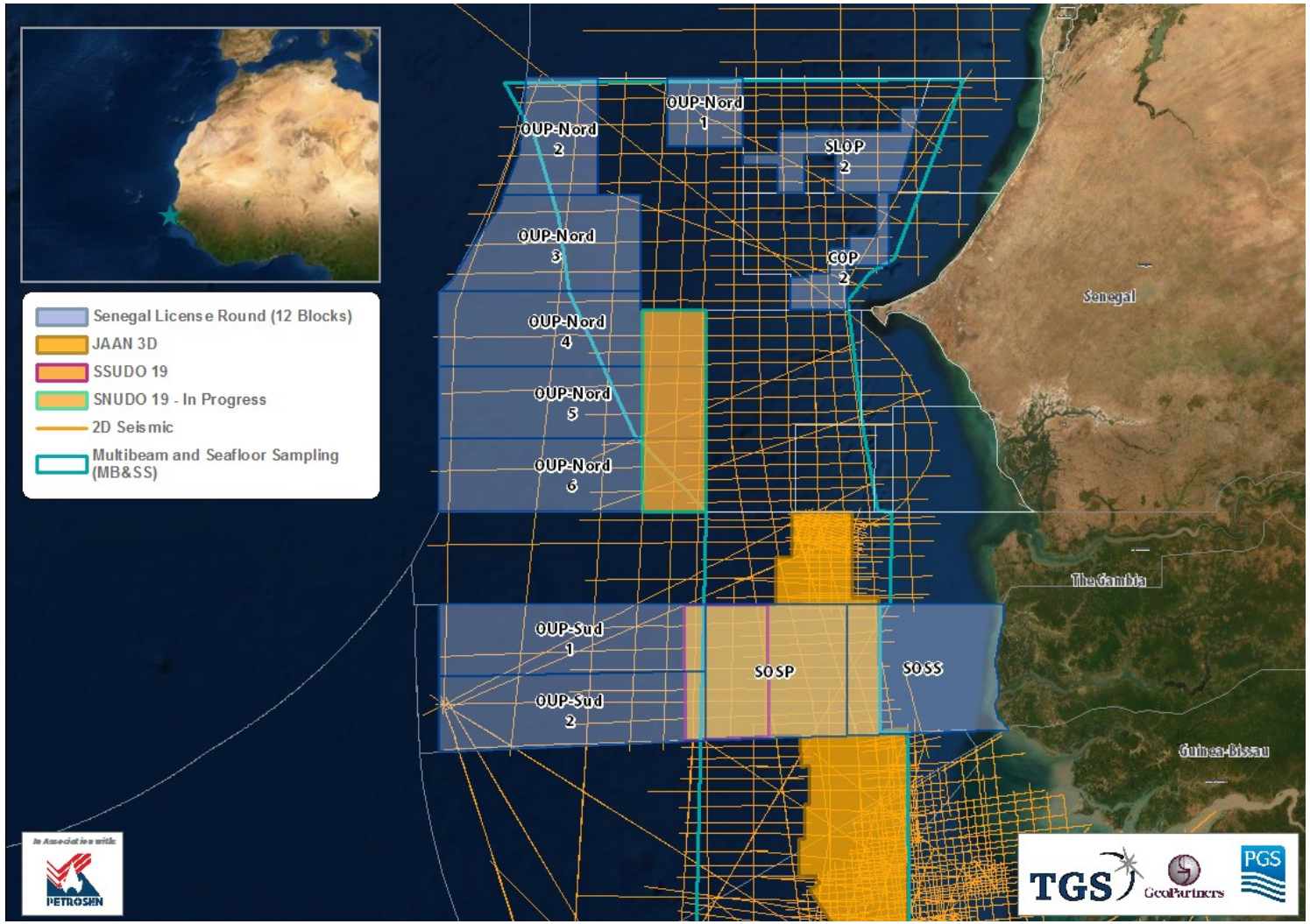
MultiBeam & Seabed Sampling

114,000 sq. km MBSS data of which ~63,000 sq.km is in Senegal

260 targeted data driven piston cores, based on:

- 709 Backscatter anomalies
- 78 Water Column Anomalies

23 JPCs and Heat flow measurements



TGS, 2020

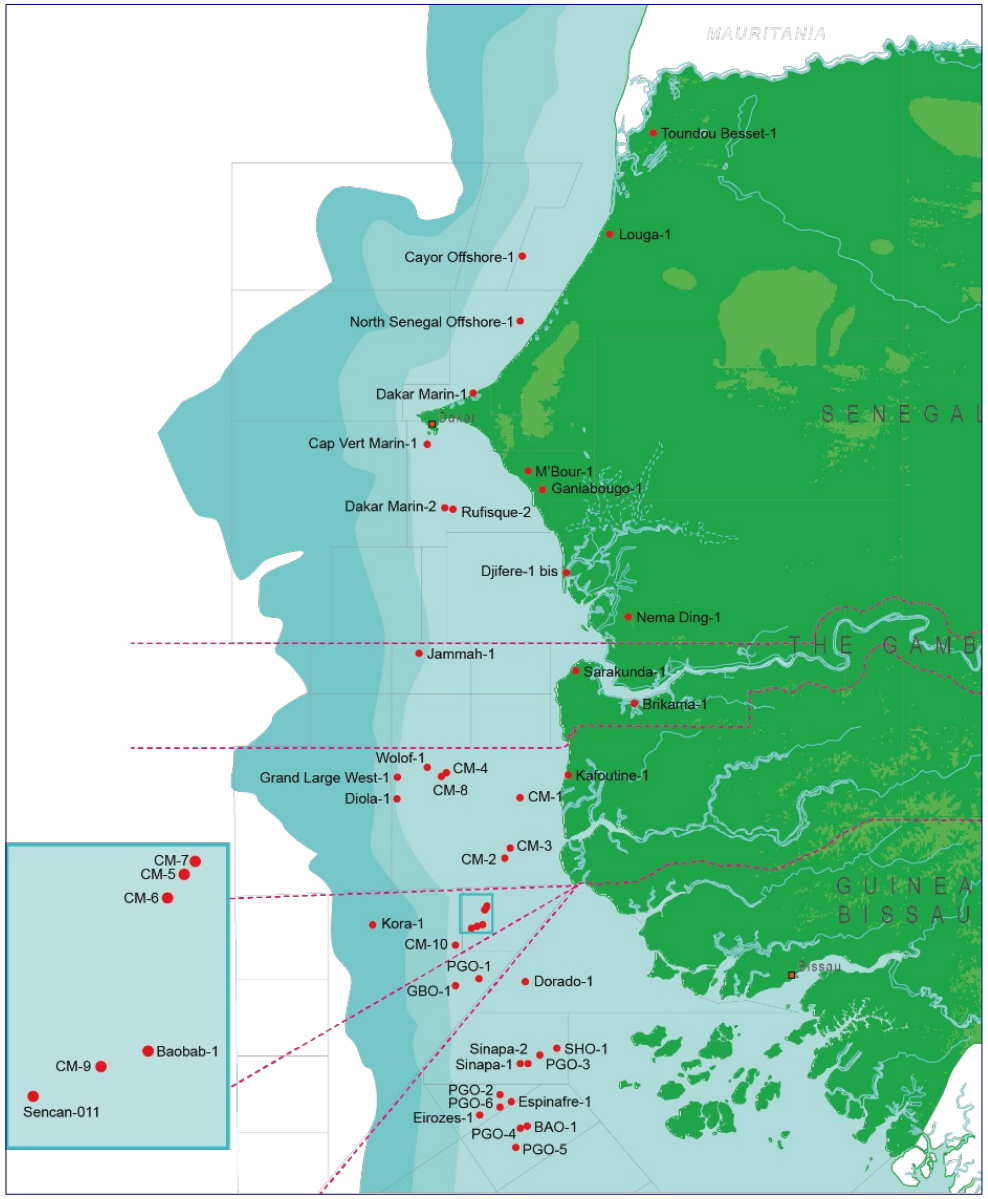
Available Data

(2015) Regional Reservoir Study and Geological Dataset

Available from Core Laboratories in association with the **PETROSEN**, GNPC, AGC

Includes 40 wells offshore

Cuttings / cores / SWC / fluids / well reports and legacy logs

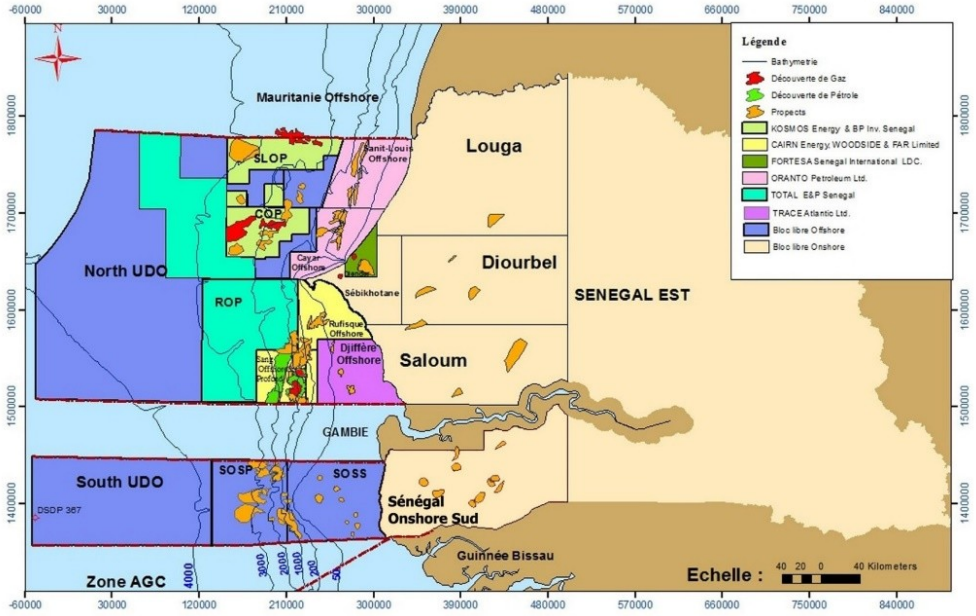


Corelab, 2020

Why invest in Senegal

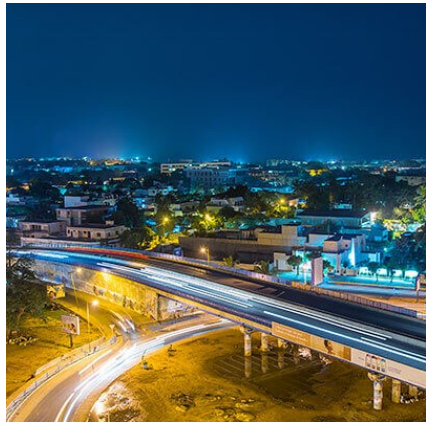
The Potential

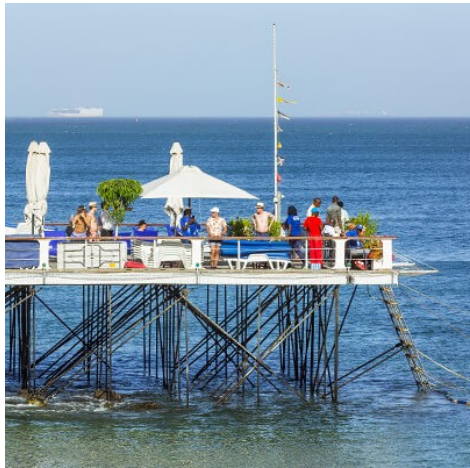
- Hydrocarbons Discoveries & Shows (Diam Niadio, Gadiaga, Dome Flore, Sangomar Deep Offshore)
- Precense of Source Rocks : (Turonian, Cenomanian, Albo-Aptian & Silurian shales)
- Multiples play types in the deep and ultra deep offshore



The Country

- A stable and open Country
- Modern and basic infrastructures
- A healthy and competitive economy
- Quality human resources
- A legal framework and tax incentive
- Privileged access to regional and international markets
- Outstanding quality of life

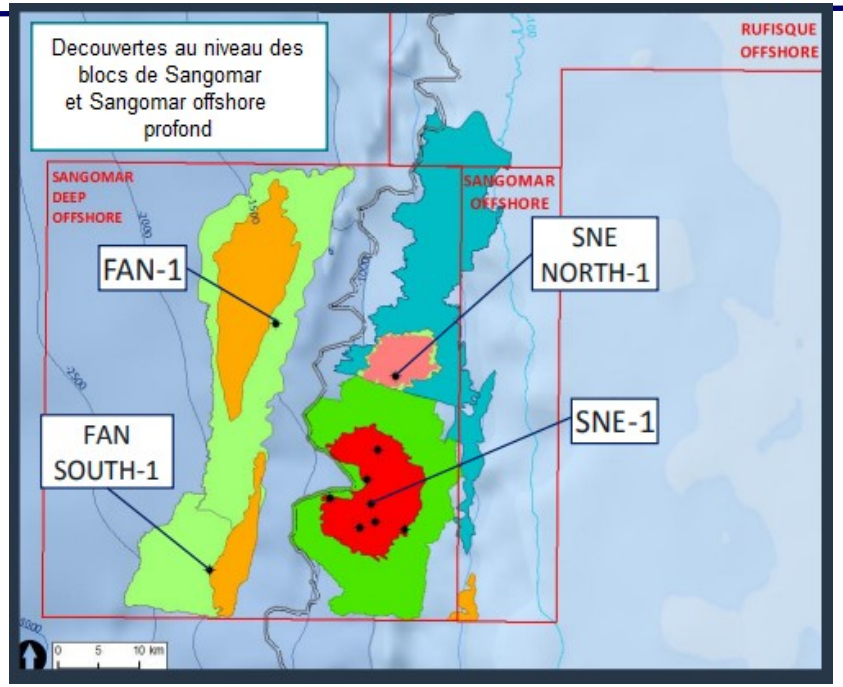


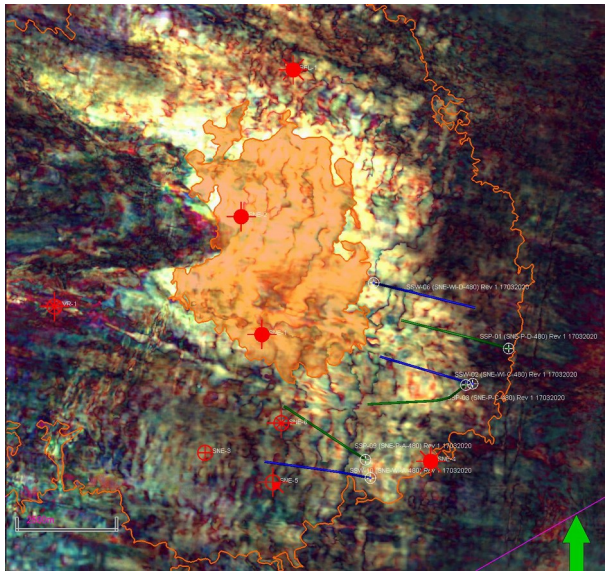


Why invest in Senegal - Sangomar Discoveries

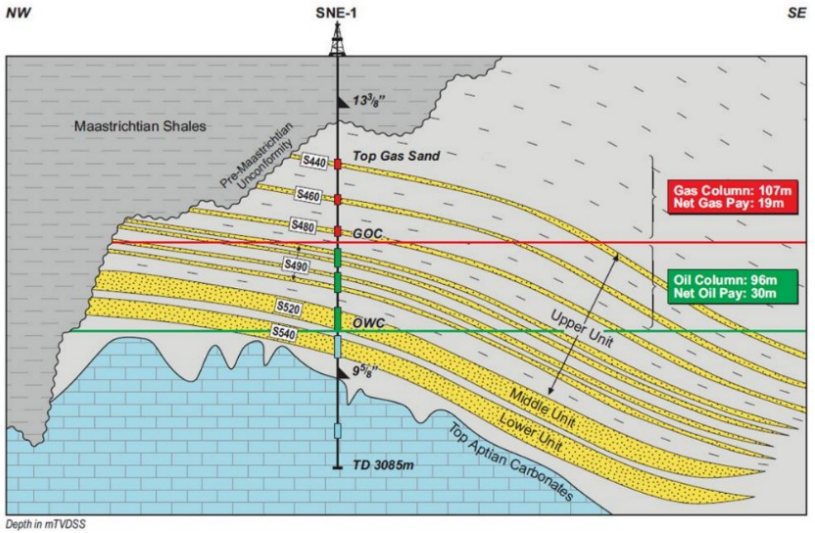
Field	Resources (P50)
Sangomar Oil (Ex. SNE)	631 million de barils
Sangomar Gas (Ex. SNE)	2.4 TCF
FAN	978 million de barils*
FAN South	192 million de barils*
SNE North pétrole	268 million de barils*
SNE North gaz	541 BCF*

** Resources in place*





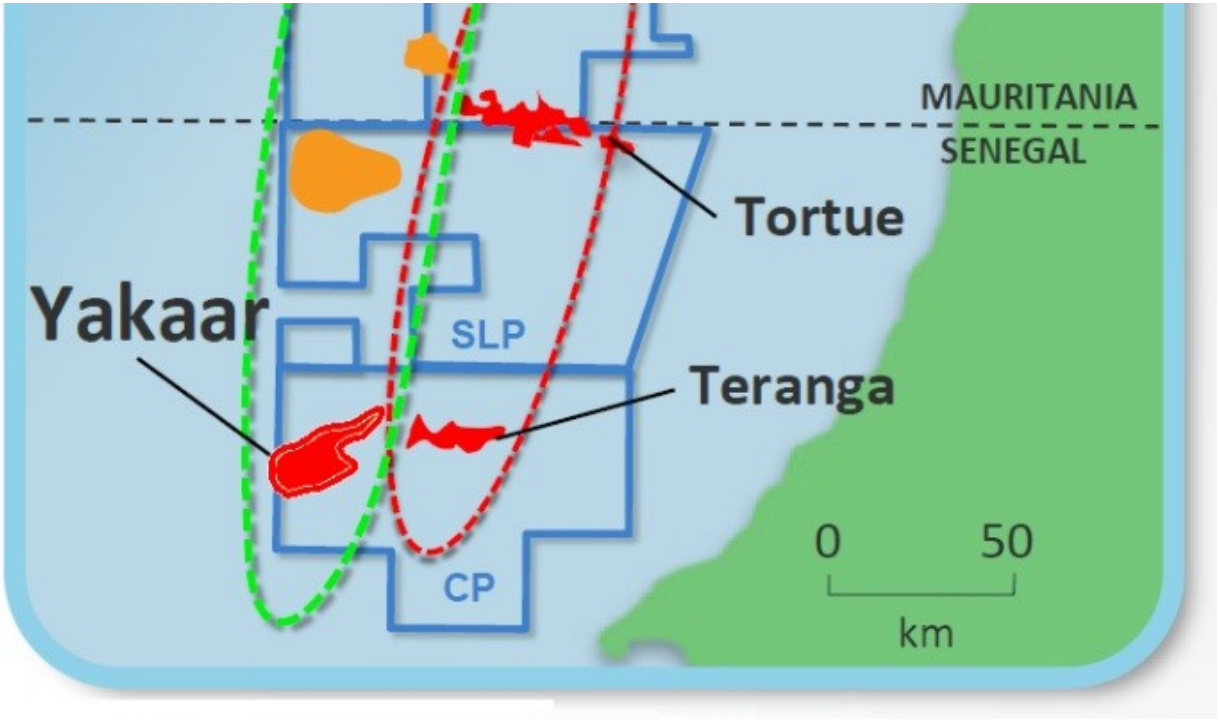
Sediment waves

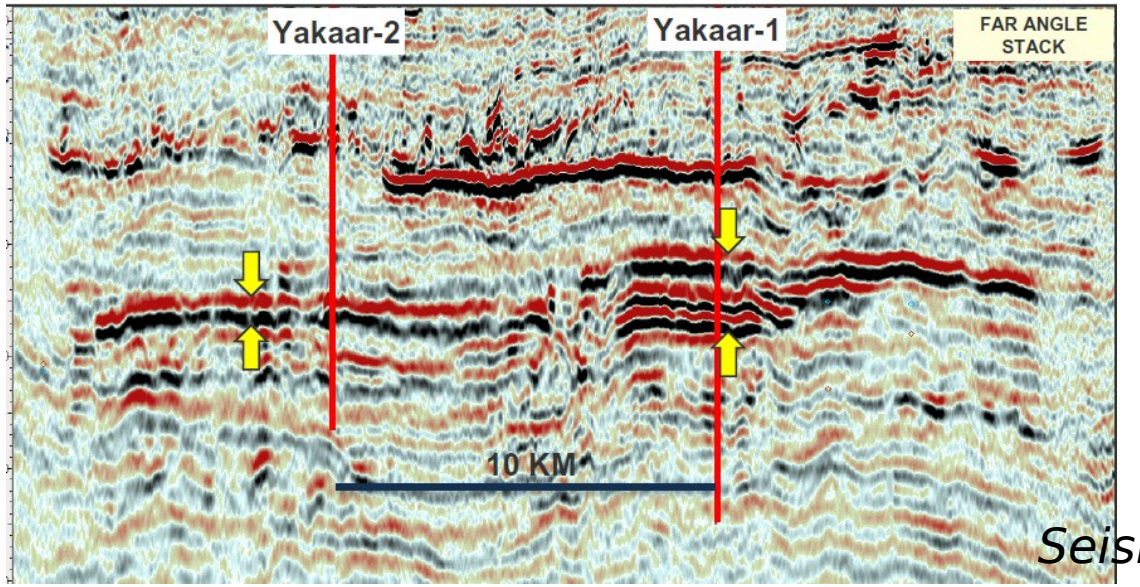


Woodside Energy

Why invest in Senegal - GTA, Yakaar/Teranga Fields

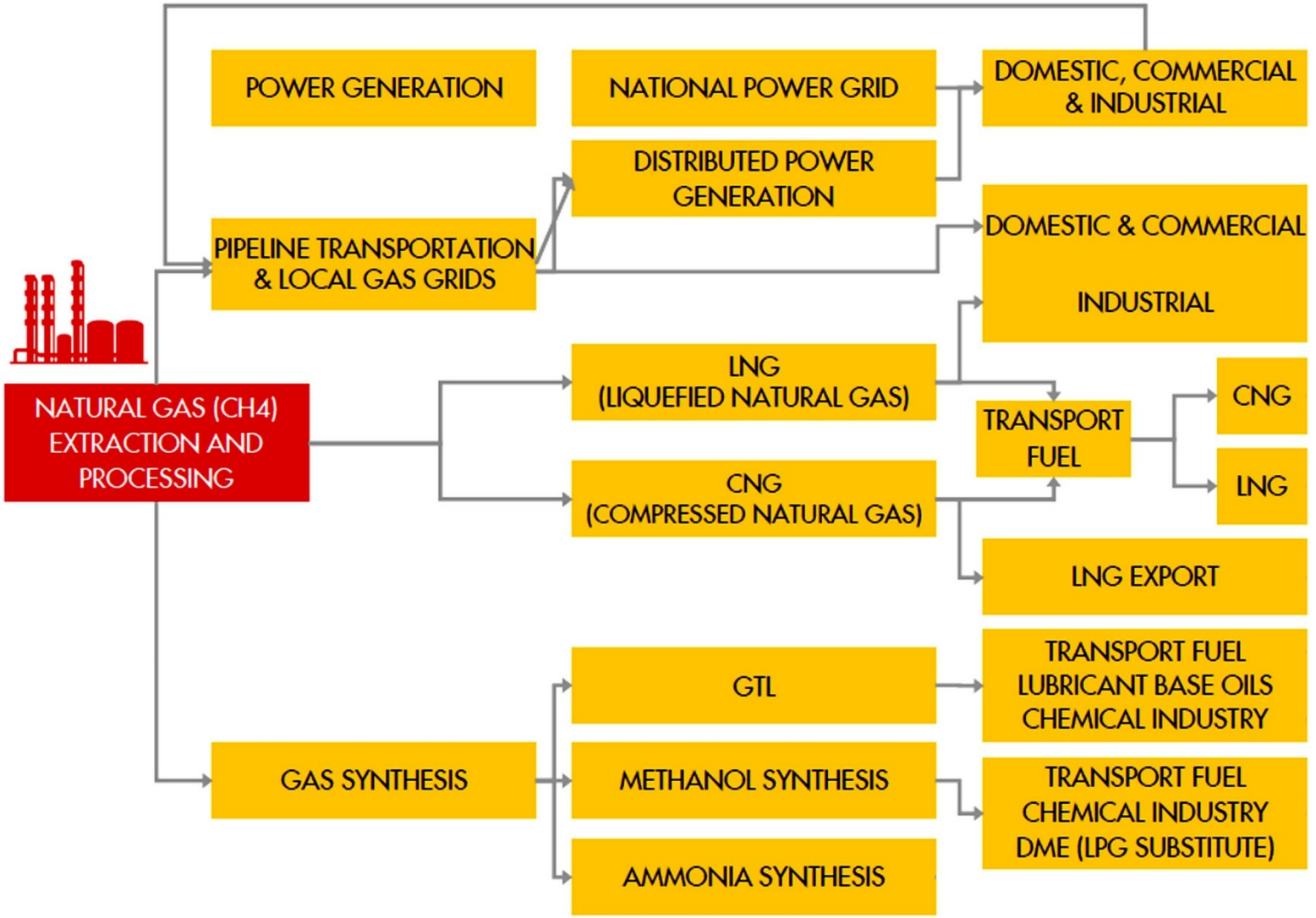
Field	GIIP (Trillion Cubic feet)
Grand Tortue/Ahmeyin (GTA)	+20
Yakaar-Teranga (YT)	32





Seismic line through Yakaar 1 and 2 wells

Why invest in Senegal - Gaz Monetization Opportunities



wells

PETROSEN

Your Sincerely