



# LIBERIA – EU BUSINESS FORUM

Forging the Future:  
Liberia's Hydrocarbon Sector Ambitions



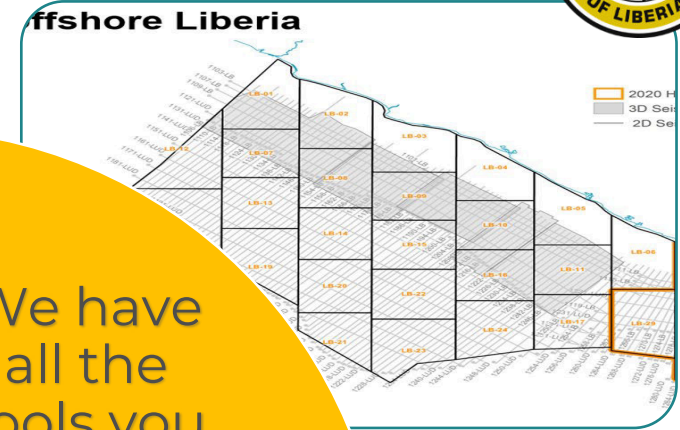
# Agenda

- Country Context
- Upstream Operations
- Our Basins and Previous Partners
- Exploration History and Narina-1 Well Success
- Executive Allocation to NOCAL
- Increasing Data Library for Onshore and Offshore
- Q&A





# COUNTRY CONT



- Liberia is a democratic republic located on the **West Coast of Africa**
- **Population:** 5.2M
- **Government:**
  - Republican, with a bicameral legislature, judiciary, and Executive
- **Politically Stable**
- **Head of State**  
-H.E. Joseph Nyumah Boakai, S

Liberia is a peaceful country, with a stable democracy & friendly people.

We have all the tools you need to explore

Our PSC terms are business-friendly

Your investment is protected by LAW

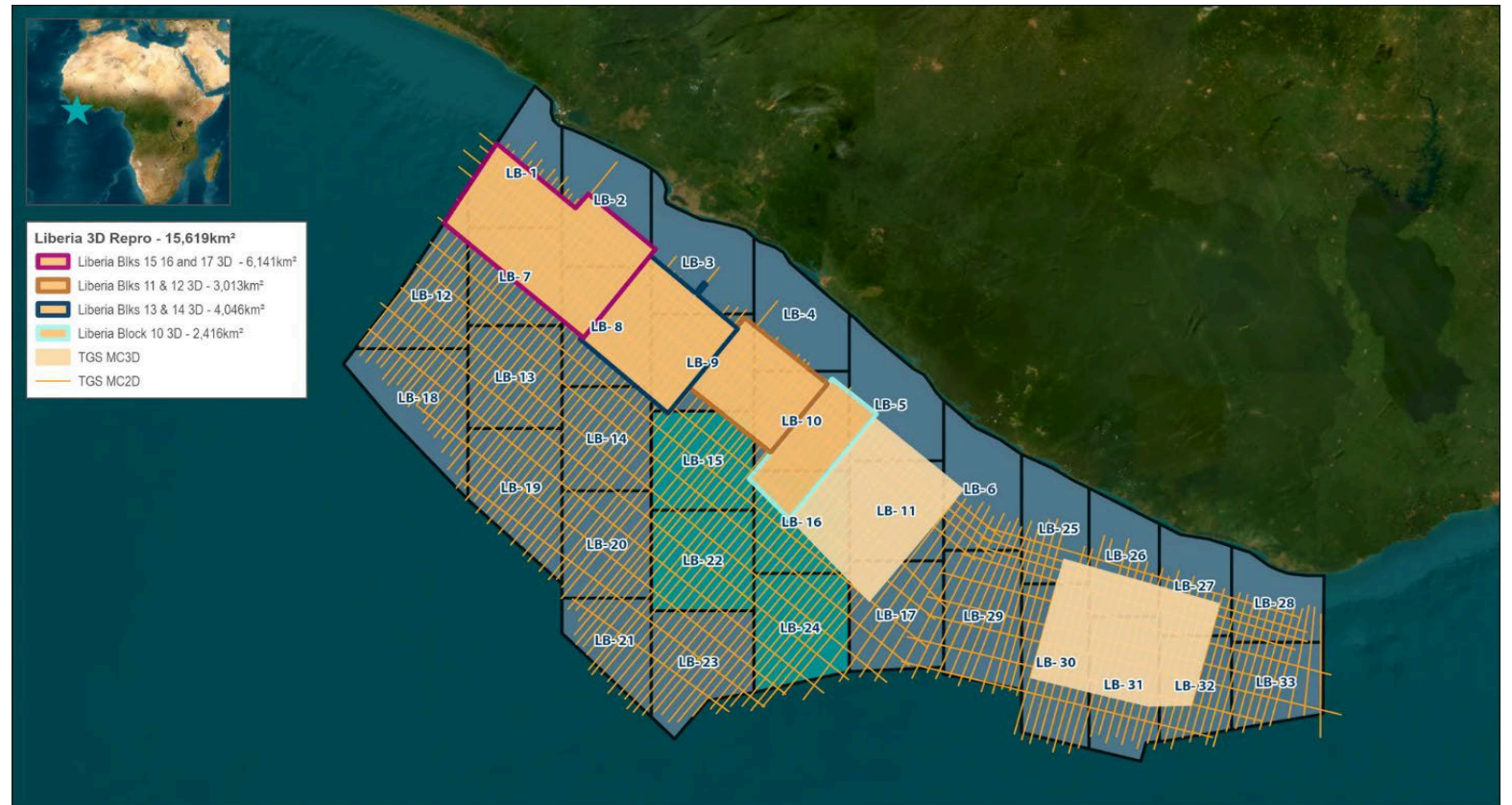


# UPSTREAM OPERATIONS – OFFSHORE: SEISMIC FROM TGS

*NOCAL provides operators and interested parties with high-quality multiclient data covering offshore Liberia. The data extent and quality are suitable for exploration and acreage evaluation. The 2D legacy surveys are currently being reprocessed with state-of-the-art software algorithms into a merged-depth product.*

## DATA AVAILABLE

- **2D**
  - Seismic: 34,000 km
  - 10,000 km in Depth
- **3D**
  - Seismic: 24,000 km<sup>2</sup>
  - 21,500 km<sup>2</sup> in Depth
- **2D gravity & magnetic data:**
  - 24,408 km
- **You may have access to reprocessed data or legacy data**



**Figure 2: Map showing offshore Liberia with seismic distribution**

# BASINS OFFSHORE LIBERIA & PREVIOUS PARTNERS



33 blocks with an area size range from 2900 km<sup>2</sup> to 3400 km<sup>2</sup>

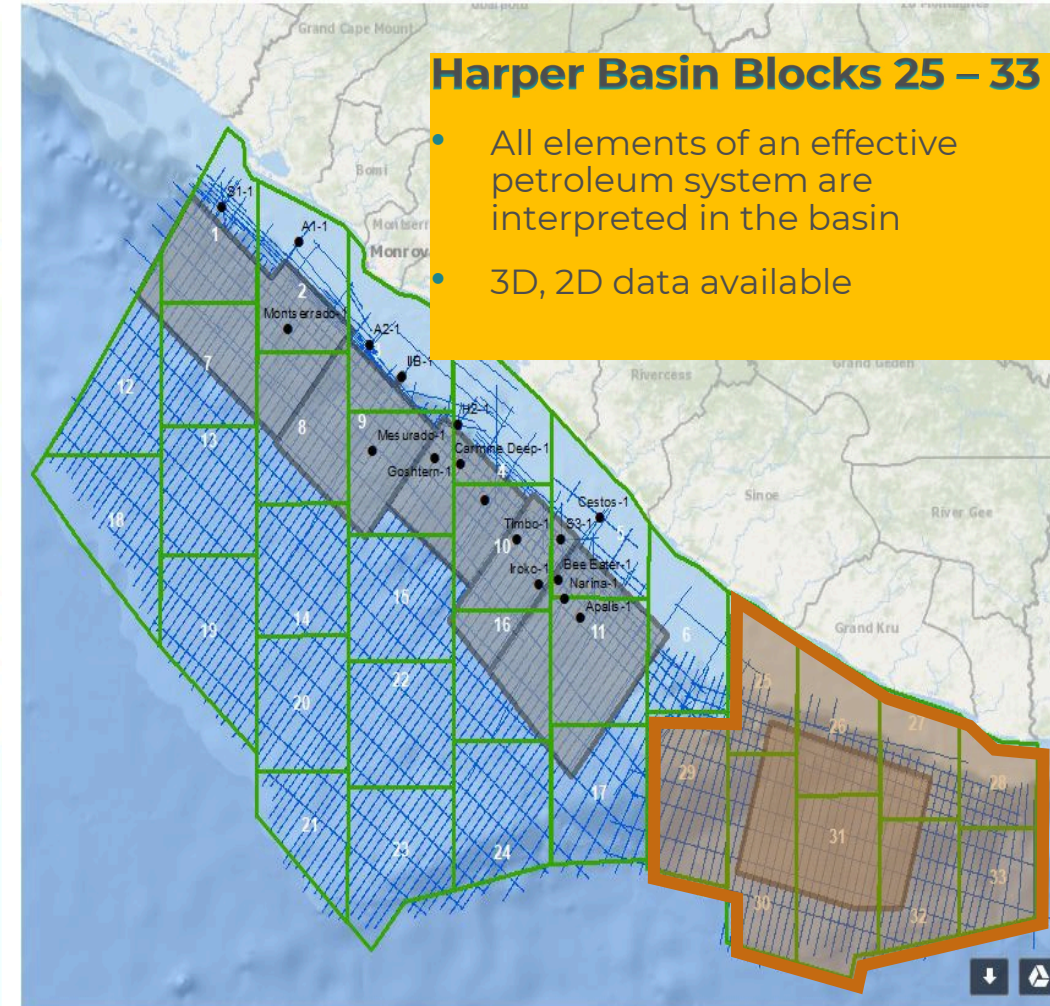
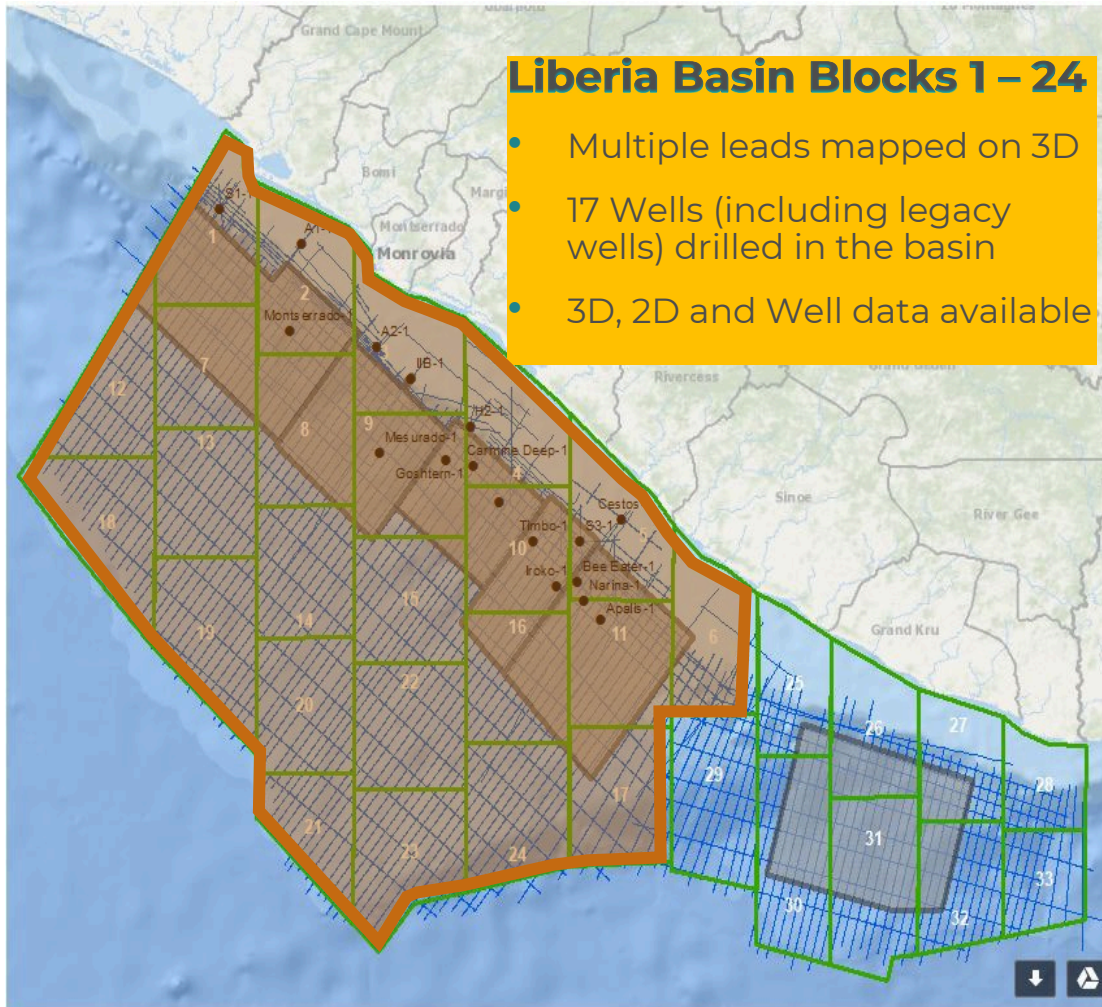


Figure 3: Maps showing the offshore Liberia Basin and Harper Basin

# EXPLORATION HISTORY – LIBERIAN OFFSHORE WELLS



17 wells drilled during two main exploration campaigns

- Shelf domain drilling phase: 1971 – 1985 (7 wells)
- Deepwater drilling phase: 2011 – 2016 (10 wells)



## Exploration Well Results

- **Hydrocarbon** presence at multiple stratigraphic levels
- **Reservoir** quality sandstones Albian to Campanian age
- Effective **source rocks** in Albian & Upper Cretaceous
- Effective **seal rocks**

**WELL DATA AVAILABLE WITH CORE LAB**

# PRE-COMMERCIAL SUCCESS IN NARINA-1 WELL

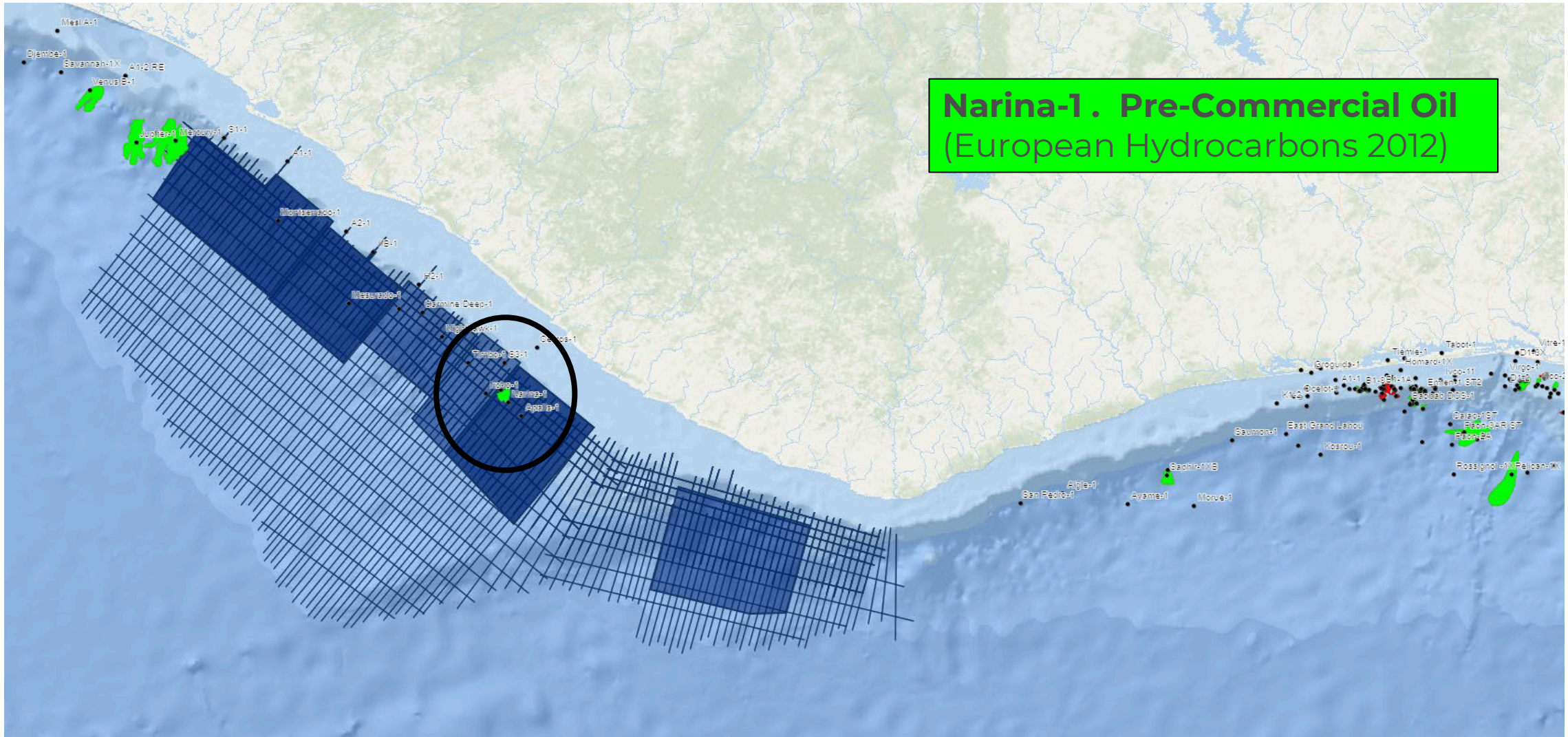
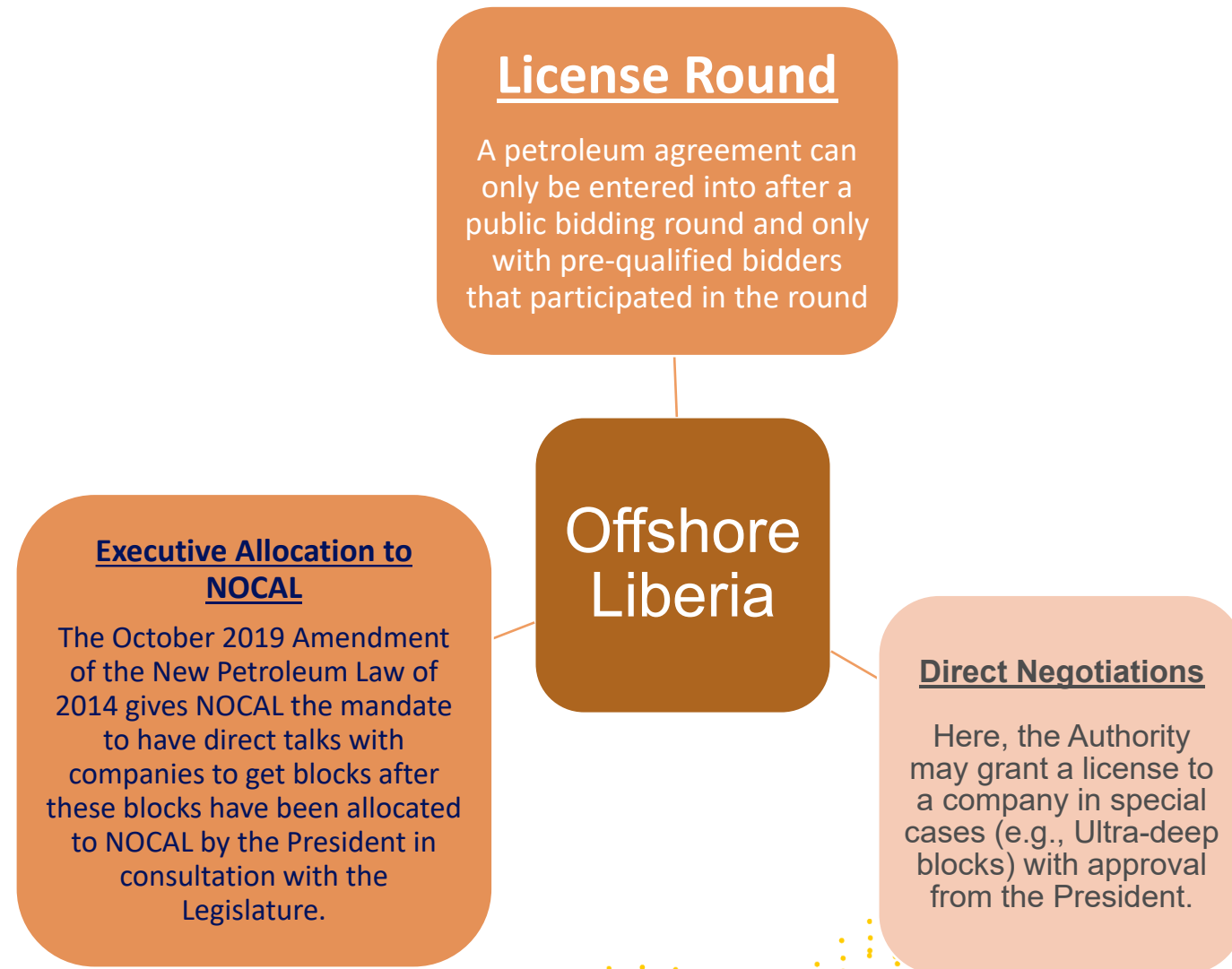


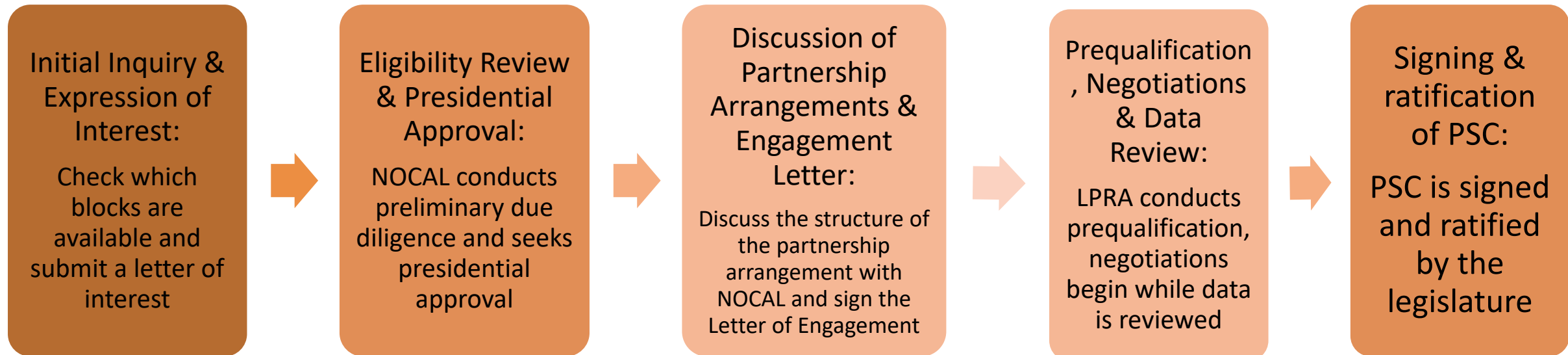
Figure 5: Map showing offshore Liberia Narina-1 Pre-commercial Success



# WAYS TO GET AN EXPLORATION LICENSE



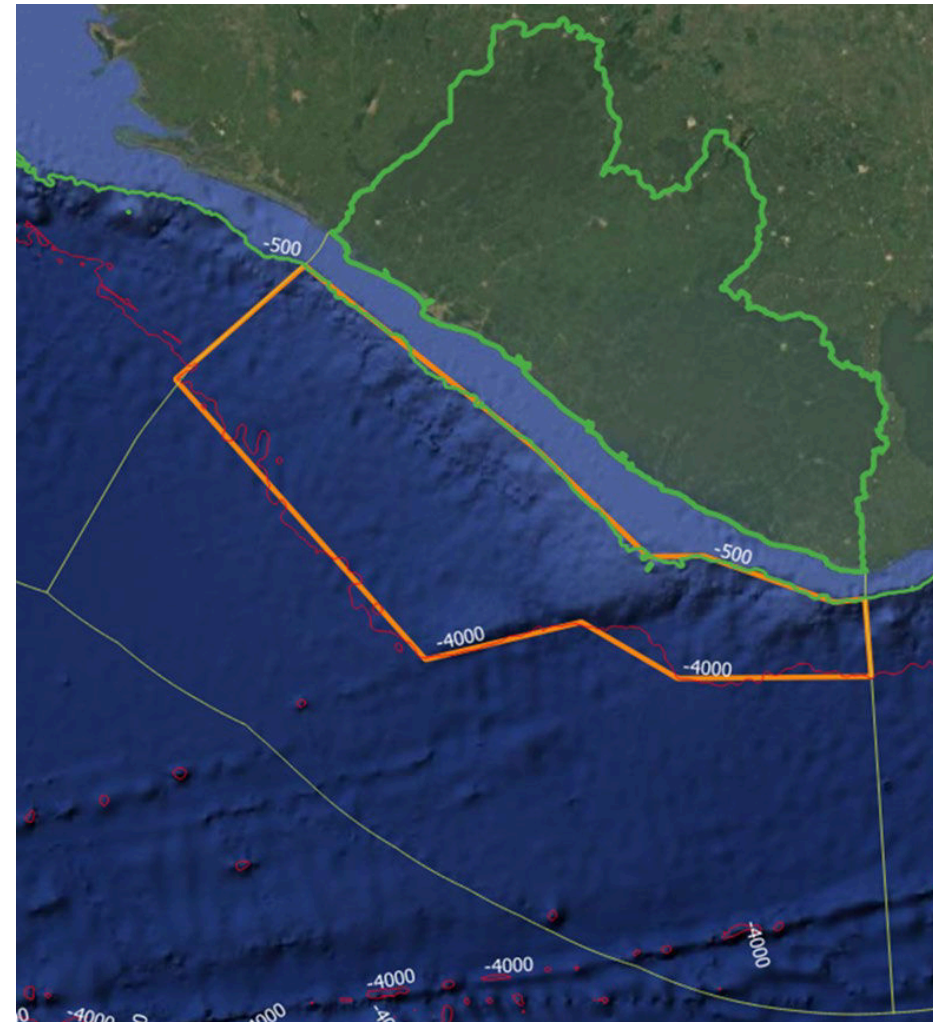
# EXECUTIVE ALLOCATION PROCESS



# INCREASING OUR DATA LIBRARY

NOCAL is considering conducting data acquisition projects offshore and onshore Liberia

- This will include 3D acquisition in deep to ultra-deep water in the Liberia Basin and the Harper Basin.
- This will also include offshore seep survey to identify seep targets, collecting piston cores, and advanced geochemical analyses
- We are also working to develop new concepts on why companies should explore select areas of the shallow waters of Liberia



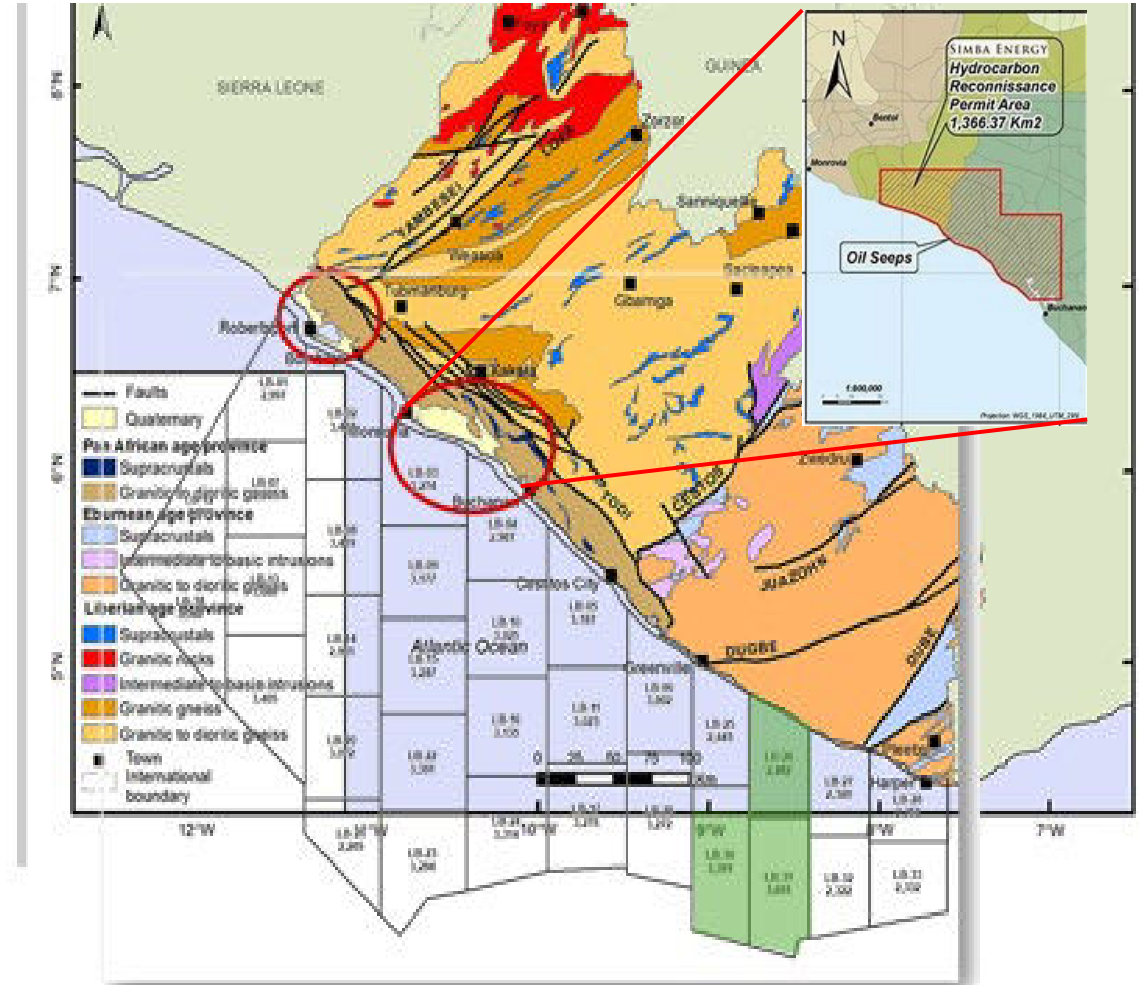
**Figure 8: Map showing project areas for new data acquisition**

# ONSHORE AND NEAR-SHORE DATA ACQUISITION



## Onshore

- Map shows sediments in Western Liberia, Cape Mount (Piso Basin), and the Montserrado/Margibi (Robert Basin) area
- Gravity and Magnetic data confirmed sedimentary basins about 5km thick, while the area to demarcate is 2,961.7 km<sup>2</sup>
- **Geological Reconnaissance** reveals oil seep in the Robert/Bassa Basin: geological history and petroleum system analogous to the conjugate Guyana
- NOCAL to conduct further geological surveys. Results will determine the necessity for further data acquisitions including **2D/3D seismic** data.



**Figure 9: Areas for onshore data acquisition for subsequent exploration**



# SHOREBASE OPPORTUNITY

- NOCAL acquired two properties near the Port of Buchanan.
- Properties legally owned by NOCAL
- Purpose/Value/ Opportunity:
  - *Set up a shorebase to meet our operational needs for exploration activities*
  - Construct a **265,000 MT** petroleum storage facility

## Current Activities:

- Survey: *Topographical, Geotechnical, and Geophysical Survey*
- Design: *Overall Engineering Design for the shore-based facility and Tank farms (Including all associated Civil, Mechanical, and Electrical design works)*



**Figure 10: Bird's-eye view of NOCAL properties in Buchanan**

# DOWNSTREAM OPPORTUNITIES

- NOCAL seeks a partnership for providing finished petroleum products and lubricants to major mining concessions and other consumers in the Liberian market
- NOCAL seeks funding/partnership for the construction of 265,000 MT petroleum storage facility in Buchanan
- NOCAL to construct multi-purpose mega-stations across Liberia. They will serve as integrated service hubs, co-locating agencies like the Liberia Revenue Authority, Liberia Business Registry, and Ministries of Transport and Foreign Affairs



# Annex



# Thanks!

Do you have any questions?  
+231 77 1-512512 / +231-887-512512  
[flai@nocal.com.lr](mailto:flai@nocal.com.lr)  
[www.nocal.com.lr](http://www.nocal.com.lr)

