

OIL & GAS OPPORTUNITIES IN PERU

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Promoviendo hidrocarburos, desarrollamos el Perú

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- Current Situation in Peru

- Peruvian Contracting Framework

- Reserves & Resources

- Promotion Areas

- Conclusion

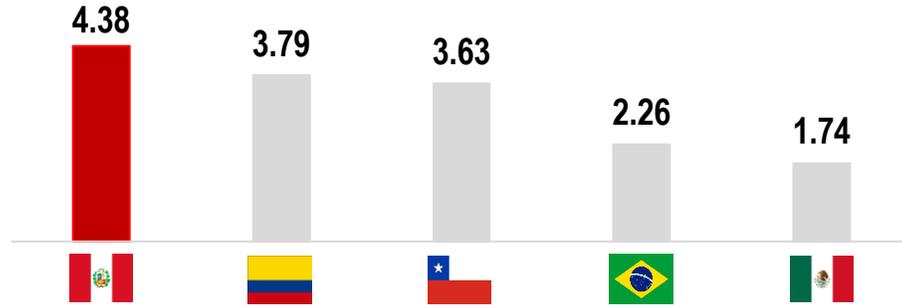
CURRENT SITUATION IN PERU



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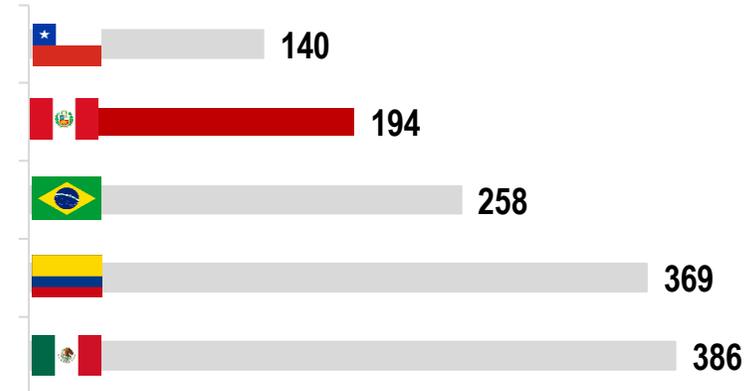
MACROECONOMIC DATA

Gross Domestic Product
(Annual % Change, 2000 - 2022 average)



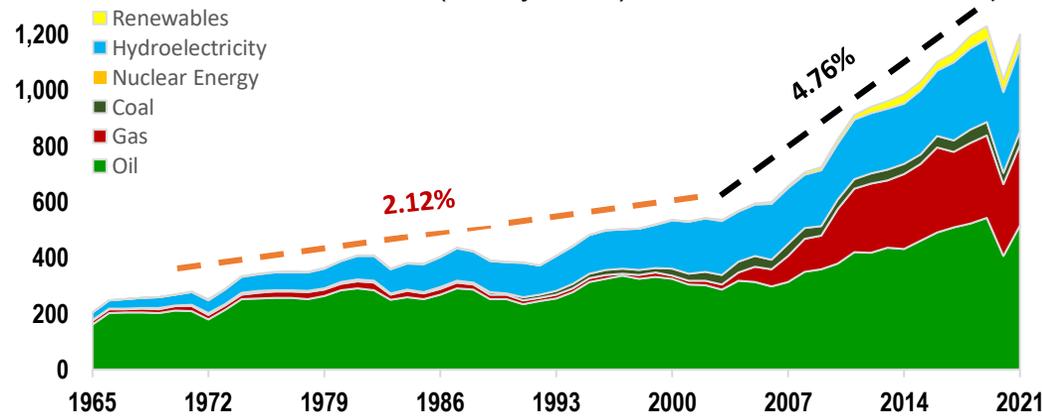
Source: FMI @ oct 2022

Latin American Country Risk - 2022



Source: JP Morgan - BCRD @ dec 2022

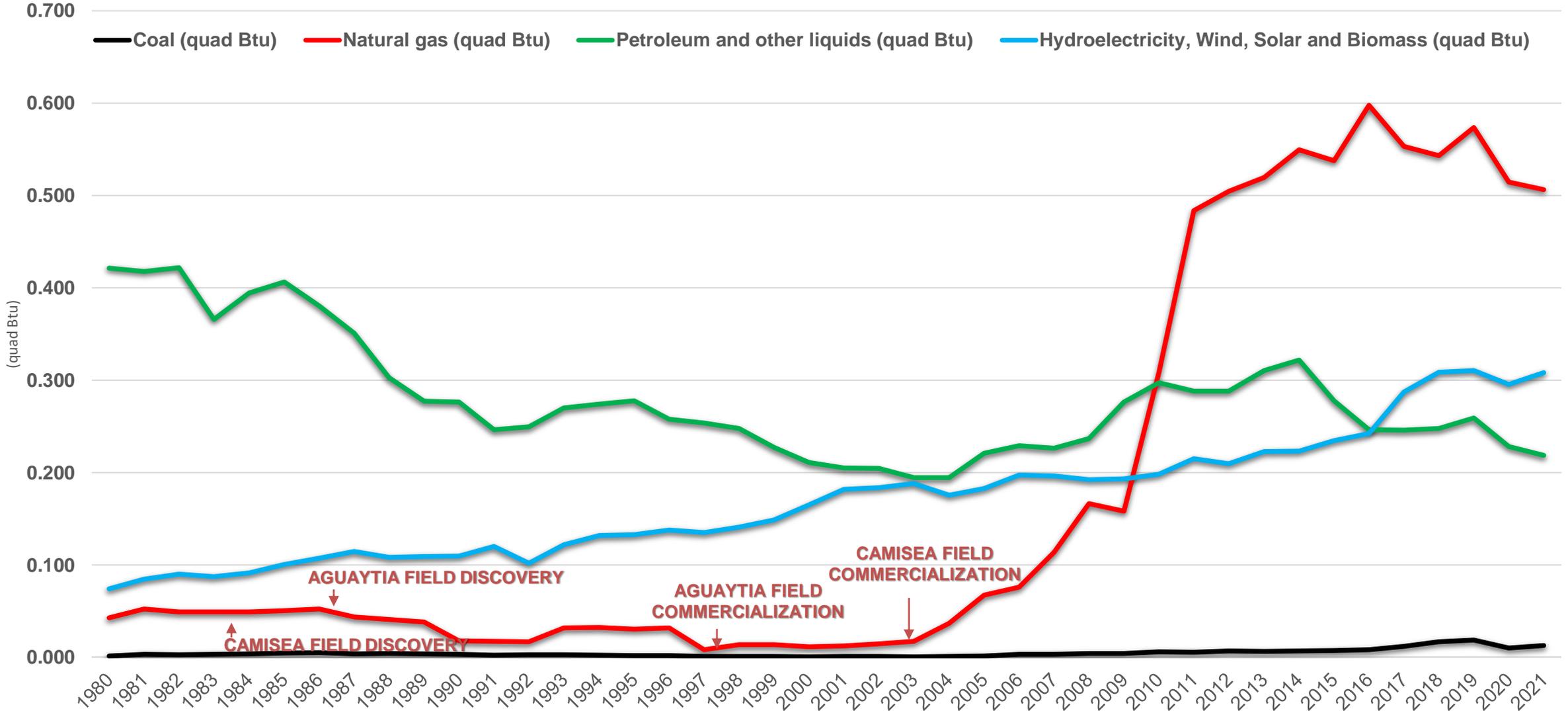
Total Energy Consumption
(Petajoules)



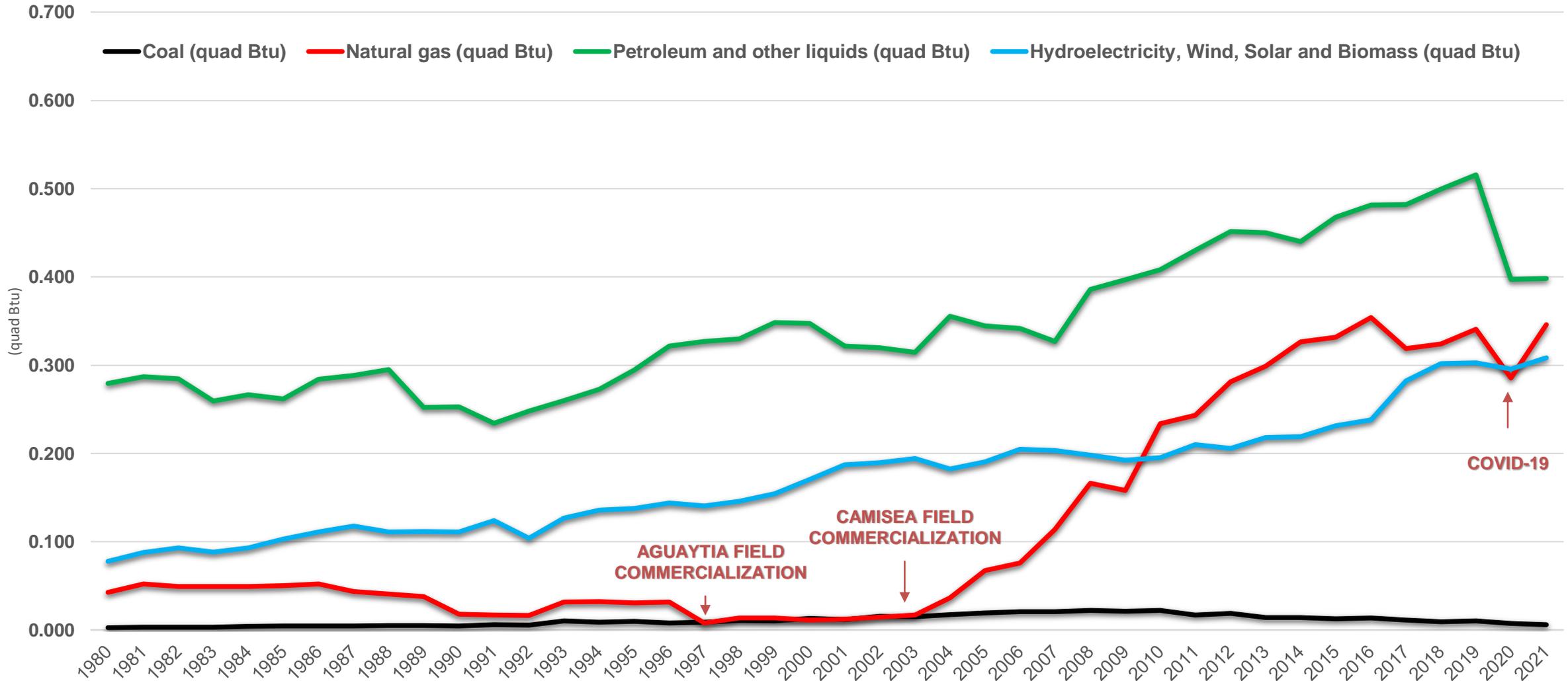
Source: BP Statistical Review of World Energy 2022

- **Population:** 33.3 million
- **Urban:** 77%
- **Rural:** 23%
- **Area:** 1,29 million km²

ENERGY PRODUCTION IN PERU



ENERGY CONSUMPTION IN PERU



PERUVIAN CONTRACTING FRAMEWORK



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LEGAL FRAMEWORK



- **Peruvian Constitution**
- **Hydrocarbon Organic Law**
(Law 26221)
 - Open Access
 - Free Competition
 - Freedom to sell the production
 - Freedom to set prices
 - “Contract-Law”
 - Stability of tax regime
 - Import tax exception (exploration phase)

“In situ” Hydrocarbons are **owned by the Peruvian Government.**

The Government has granted **PERUPETRO the right of ownership** over the Hydrocarbons extracted

PERUPETRO can **enter into License, Service or other type of Contracts and Agreements** with OC.

PERUPETRO’s property rights over extracted hydrocarbons are transferred to **Licensees.**

Important: 18% sales tax refund (exploration)



Regulations for the environmental protection

Supreme Decree 039-2014-EM



Royalties & Retributions Regulations

Supreme Decree 049-93-EM & 017-2003-EM



Regulations for Citizenship Participation

Supreme Decree 002-2019-EM

HOW TO STEP IN PERU?



DIRECT NEGOTIATION WITH PERUPETRO:

- According to **Law N° 26221**, companies can request **Direct Negotiation** for an available area as long as there is only one interested company



BIDDING PROCESS

- Blocks to be **individually offered** in a Bidding Round



TECHNICAL EVALUATION AGREEMENTS

- On **areas for exploration**.
- First Option Right to **Negotiate a License Contract**.
- 24 month period



- **PERUPETRO** will **evaluate the technical, economic and financial capacity** of the company (Qualification process)
- Companies may **consult existing technical information** at **PERUPETRO's Data Base** at free cost. (bancodedatos.perupetro.com.pe)

LICENSE CONTRACTS



LONG DURATION CONTRACTS

Exploration Phase

- 7 years + 3 years extension.

Production Phase

- Oil and Associated-Gas Production: **Up to 30 years.**
- Non-associated Gas production: **Up to 40 years.**

Royalties linked to success:

- From **5% to 20%**, depending on the volume of production; or
- From **15% to 35%** depending on a “R” Factor (reduction is considered in case of mature fields)

Ability to keep Non Commercial Discoveries:

- 5 years for Oil Discoveries to make transportation possible
- 10 years for Non-associated Natural Gas to develop a market.

Exploratory Working Units in excess of the amount committed in one period may be carried forward to the following period

RESERVES & RESOURCES

PERU: COUNTRY OF OPPORTUNITIES



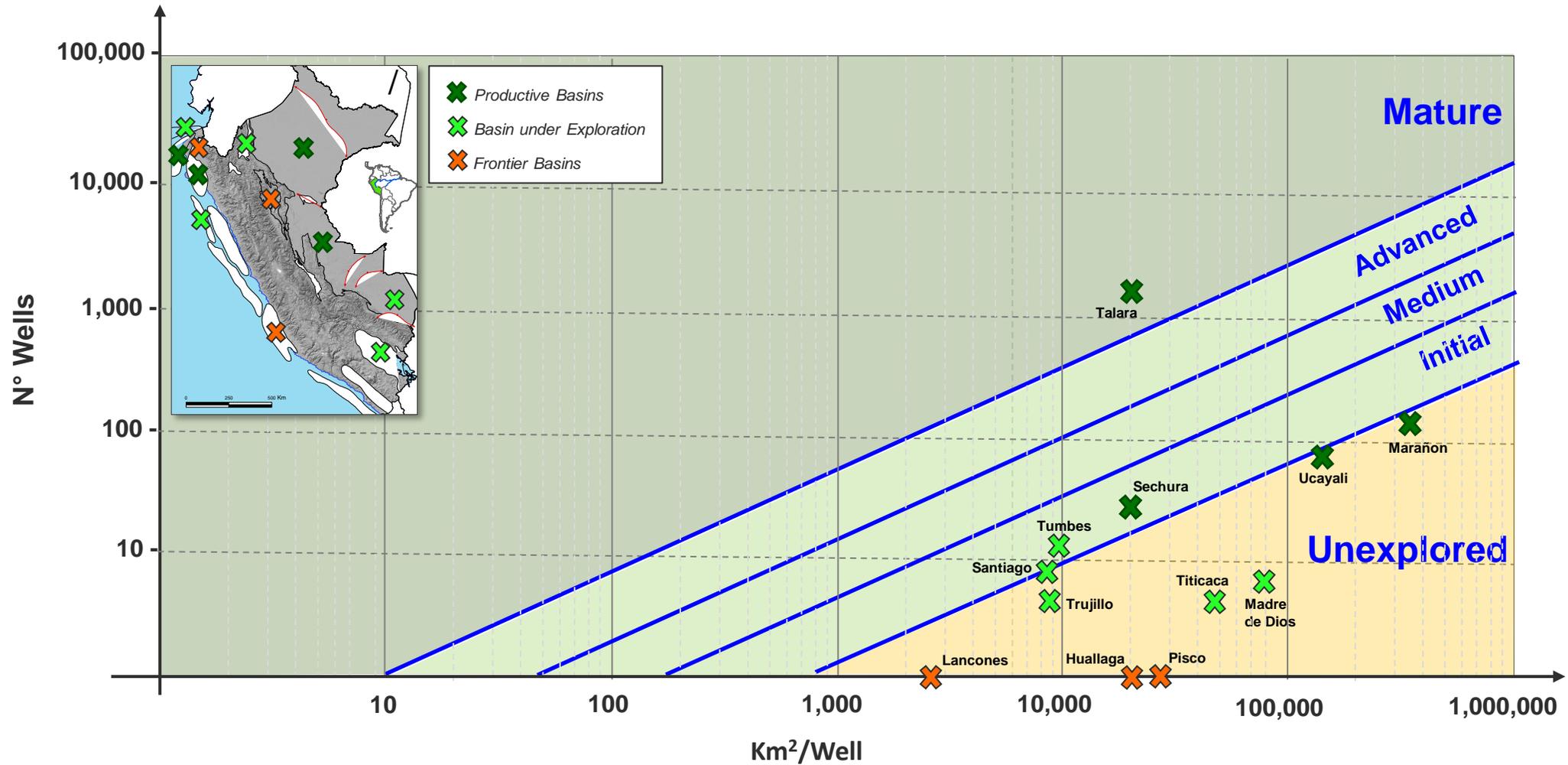
18 basins
with potential

and only

5 in
production

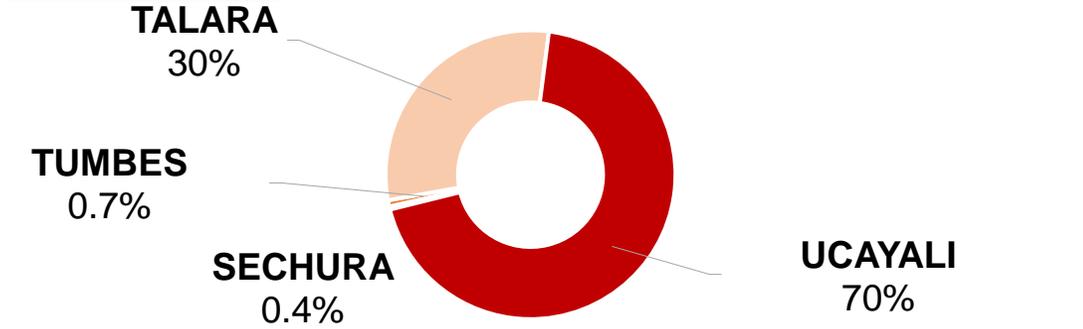
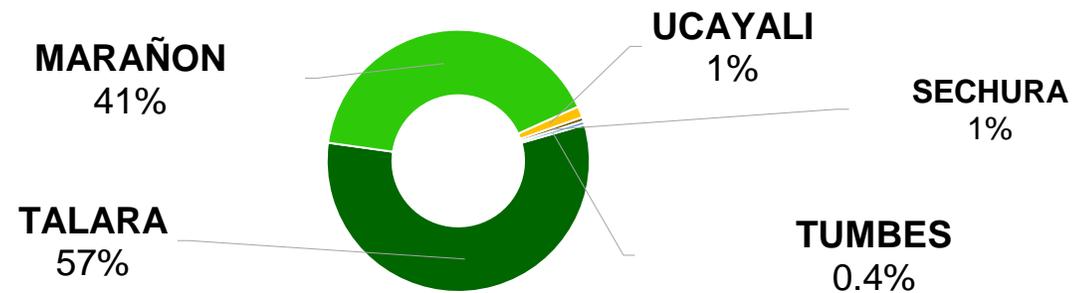
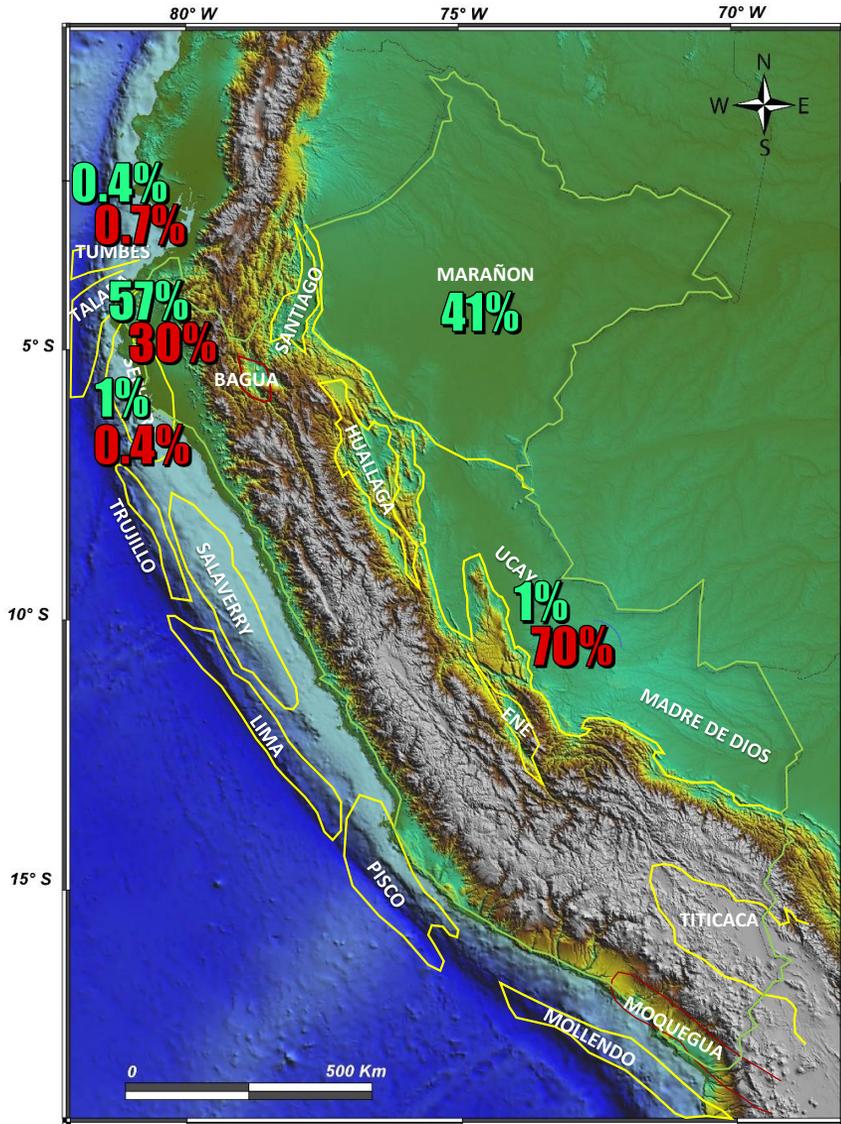
Potential to explore

KNOWLEDGE OF THE PERUVIAN BASINS

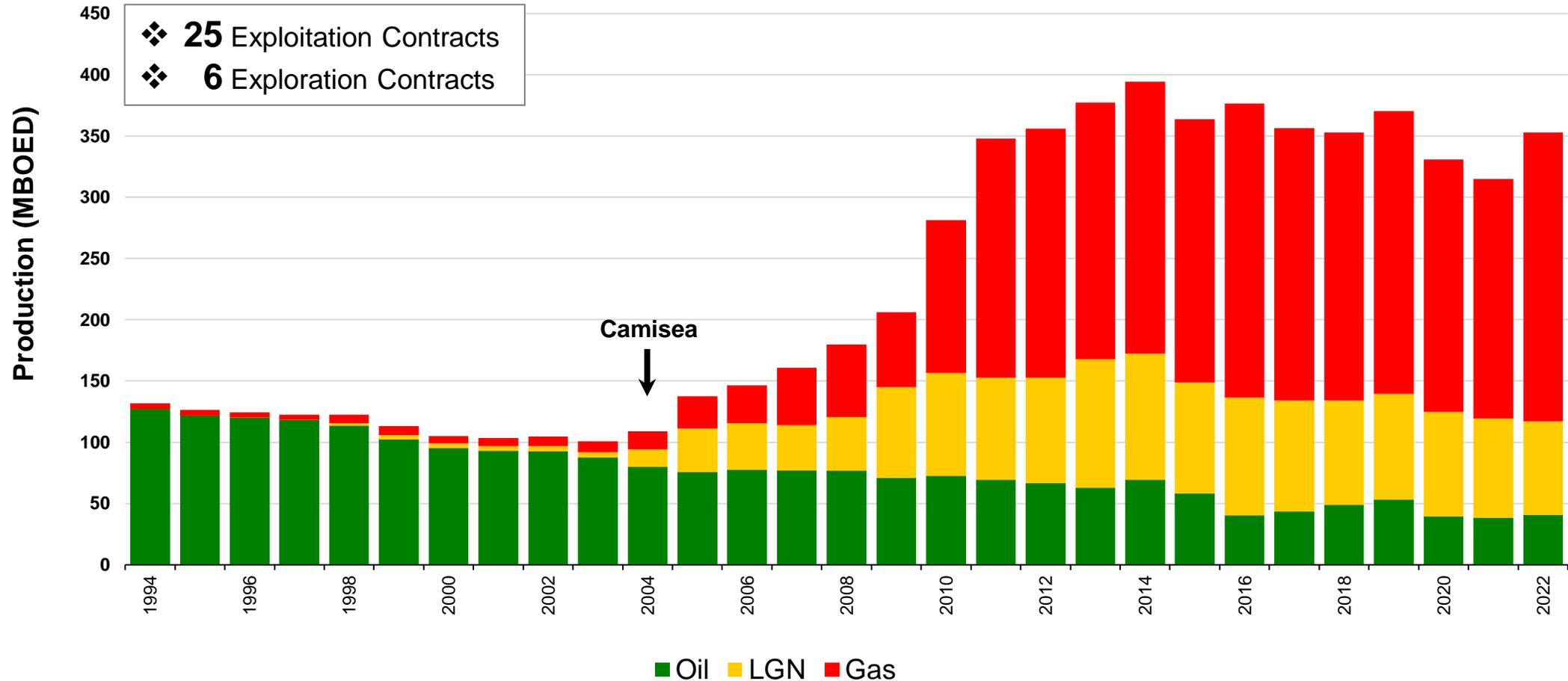


PRODUCED HYDROCARBONS

Accumulated at december 2022



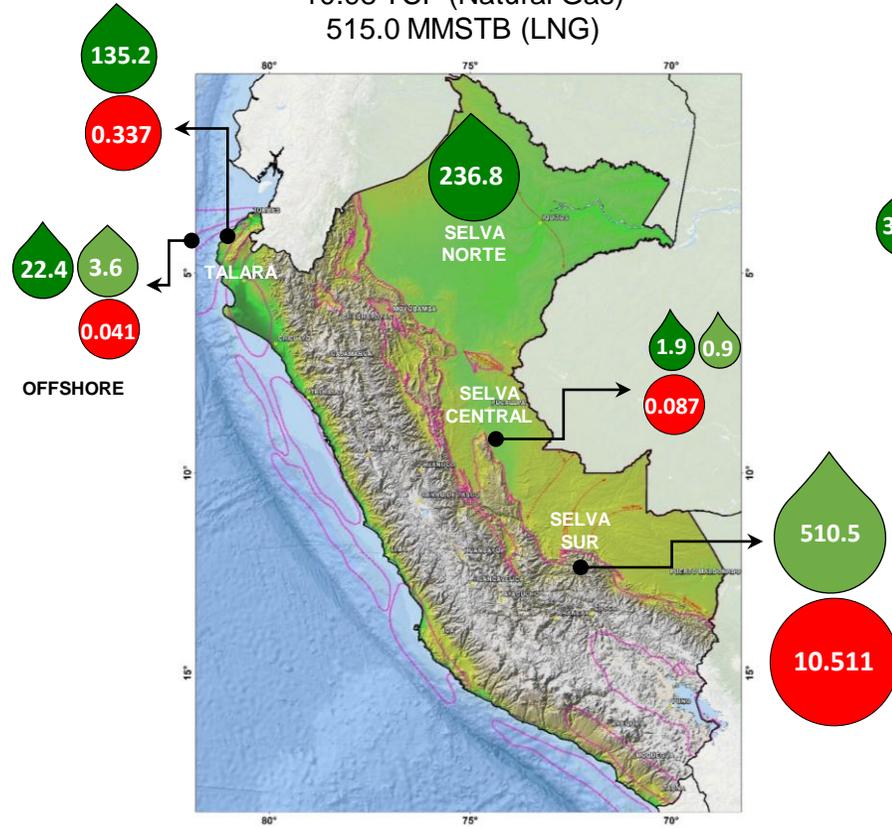
HISTORICAL HYDROCARBONS PRODUCTION



HYDROCARBON RESERVES AND RESOURCES

Proven Reserves + Probable

396.3 MMSTB (Oil)
10.98 TCF (Natural Gas)
515.0 MMSTB (LNG)

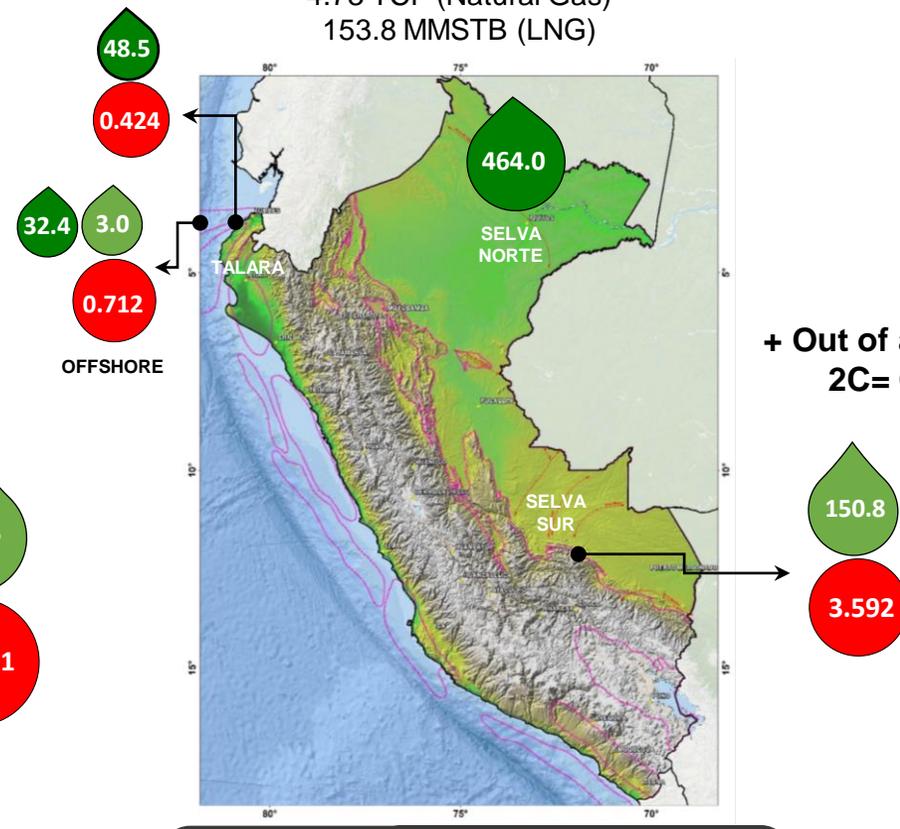


**Reserve
Autonomy
Index**

Oil: 13.3 years
Gas: 19.4 years
LNG: 13.7 years

Contingent Resources 2C

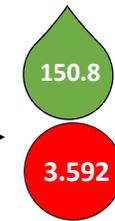
551.4 MMSTB (Oil)
4.73 TCF (Natural Gas)
153.8 MMSTB (LNG)



**Resource
Autonomy
Index**

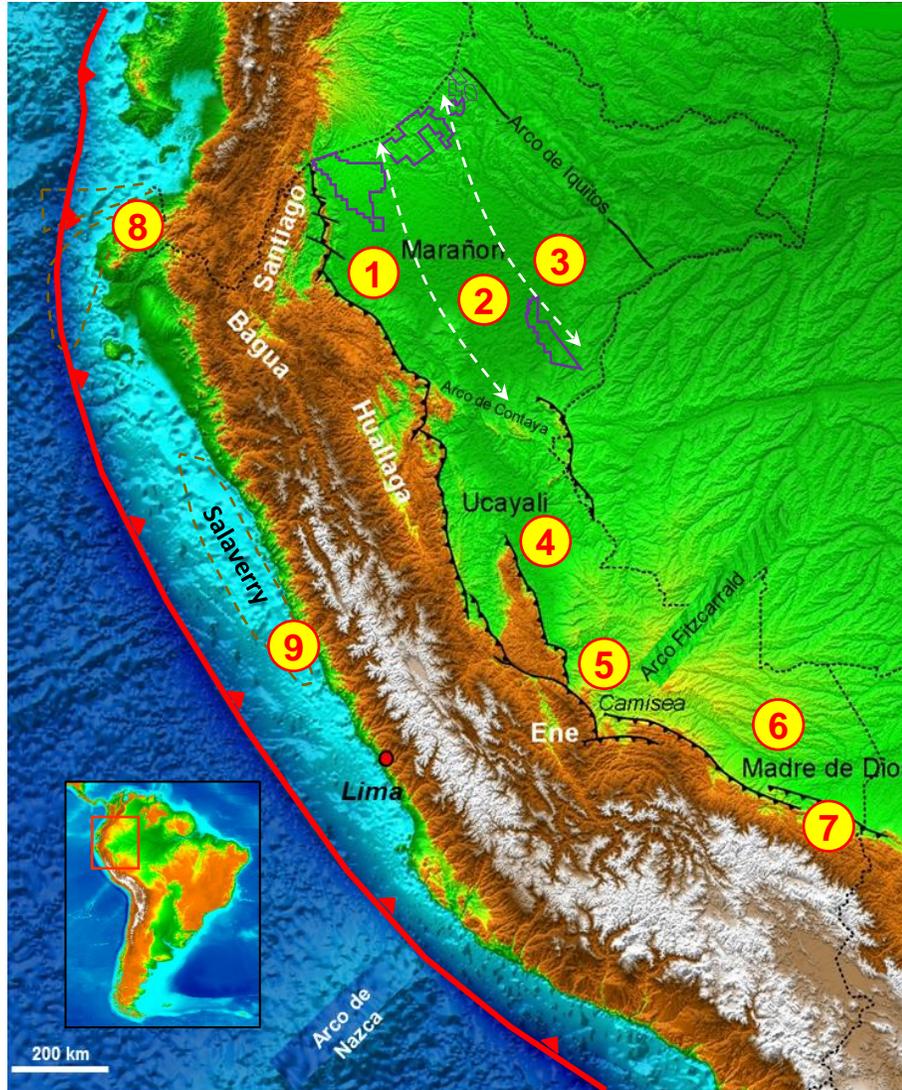
Oil: 27.0 years
Gas: 27.6 years
LNG: 20.4 years

+ Out of a License Contract:
2C= 6.54 MMSTB (Oil)



● Oil
● Natural Gas
● LNG

PROMOTION AREAS



1

Light Oil area – Western Marañón Basin

2

Medium Oil area – Center Marañón Basin

3

Heavy Oil area – East Marañón Basin

4

Light Oil area – North Ucayali Basin

5

Gas and Condensate area – South Ucayali Basin

6

Light Oil area – Foreland Madre de Dios Basin

7

Gas and Condensate area – FTB Madre de Dios Basin

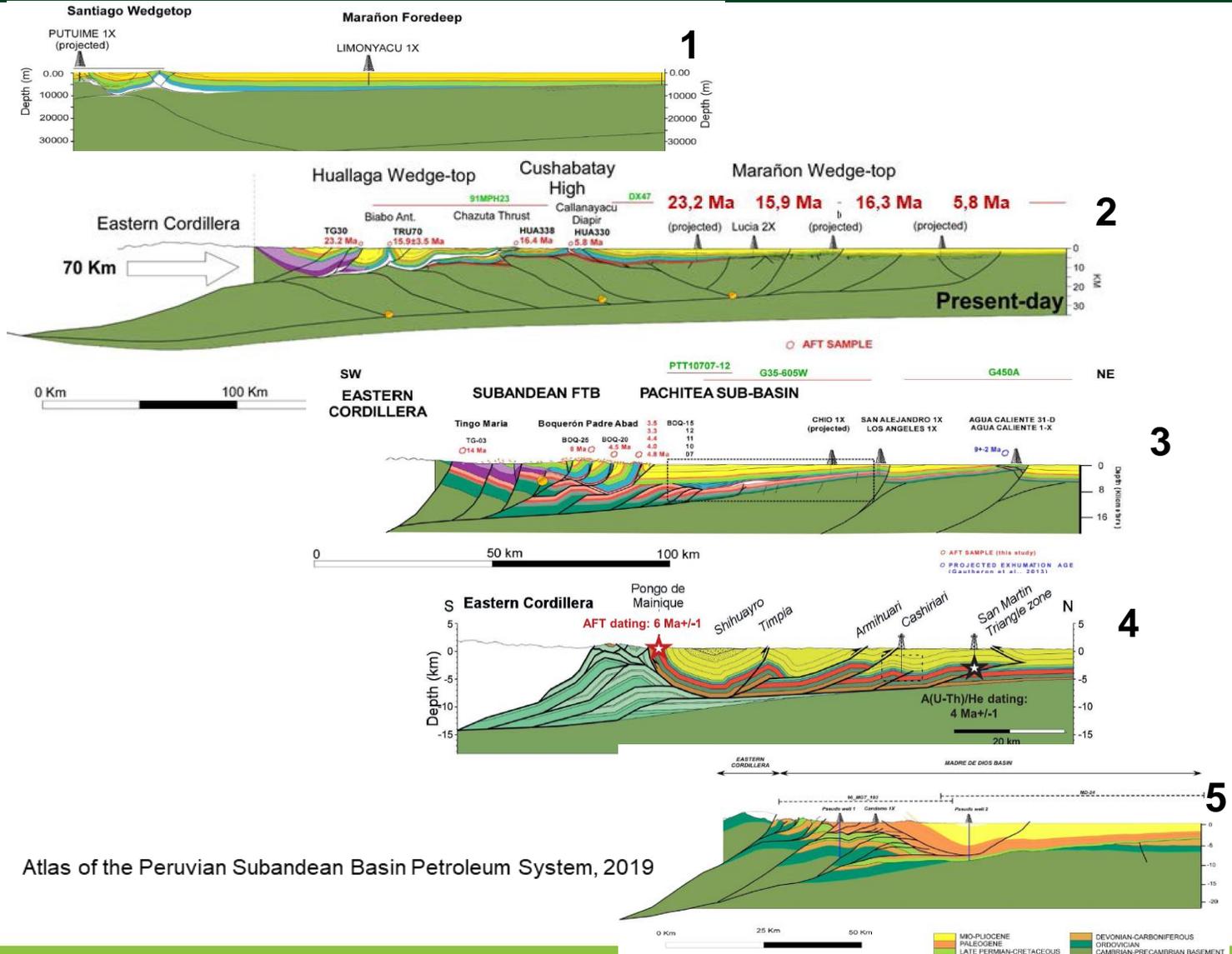
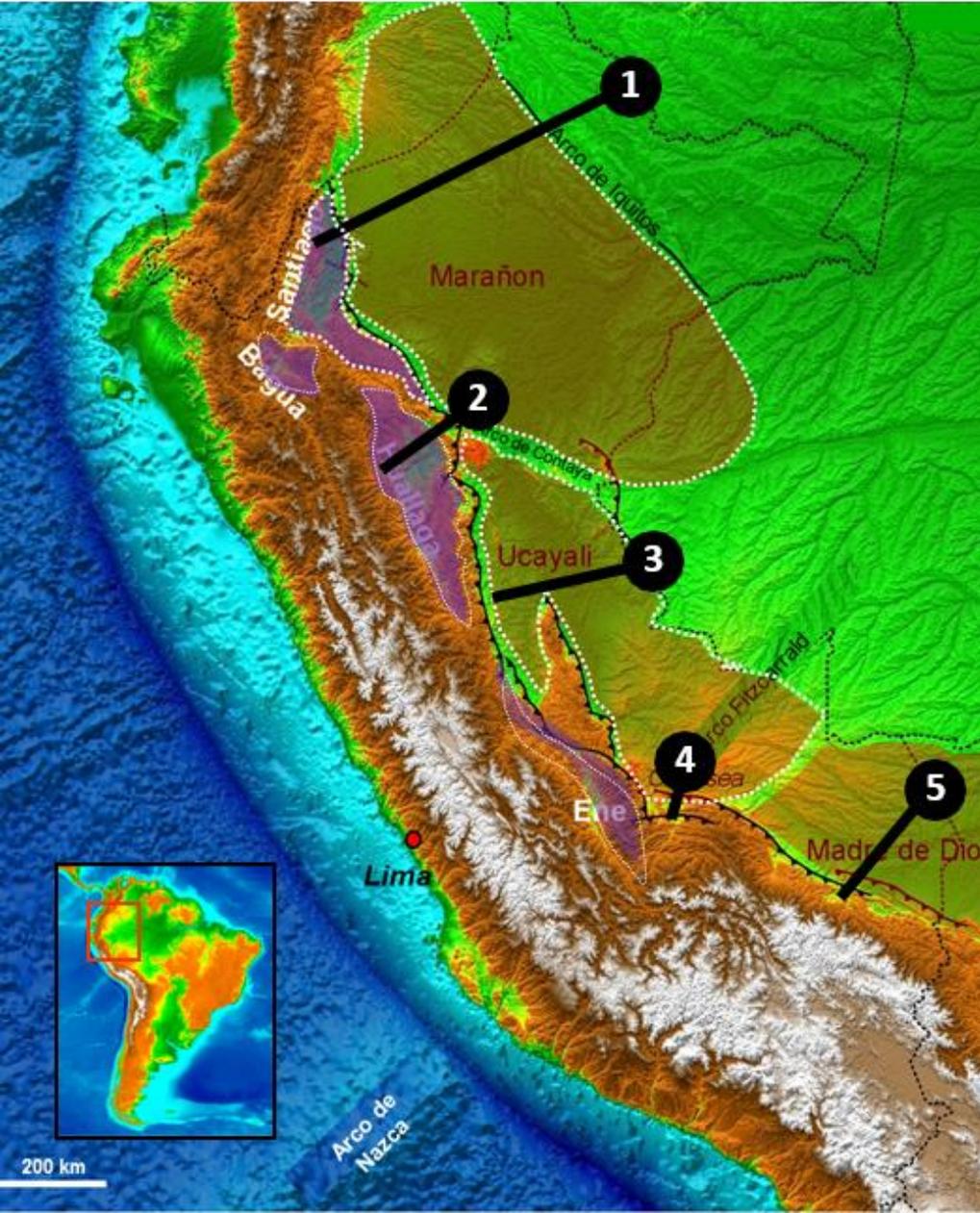
8

Light Oil and Gas area – Tumbes and Talara Basin

9

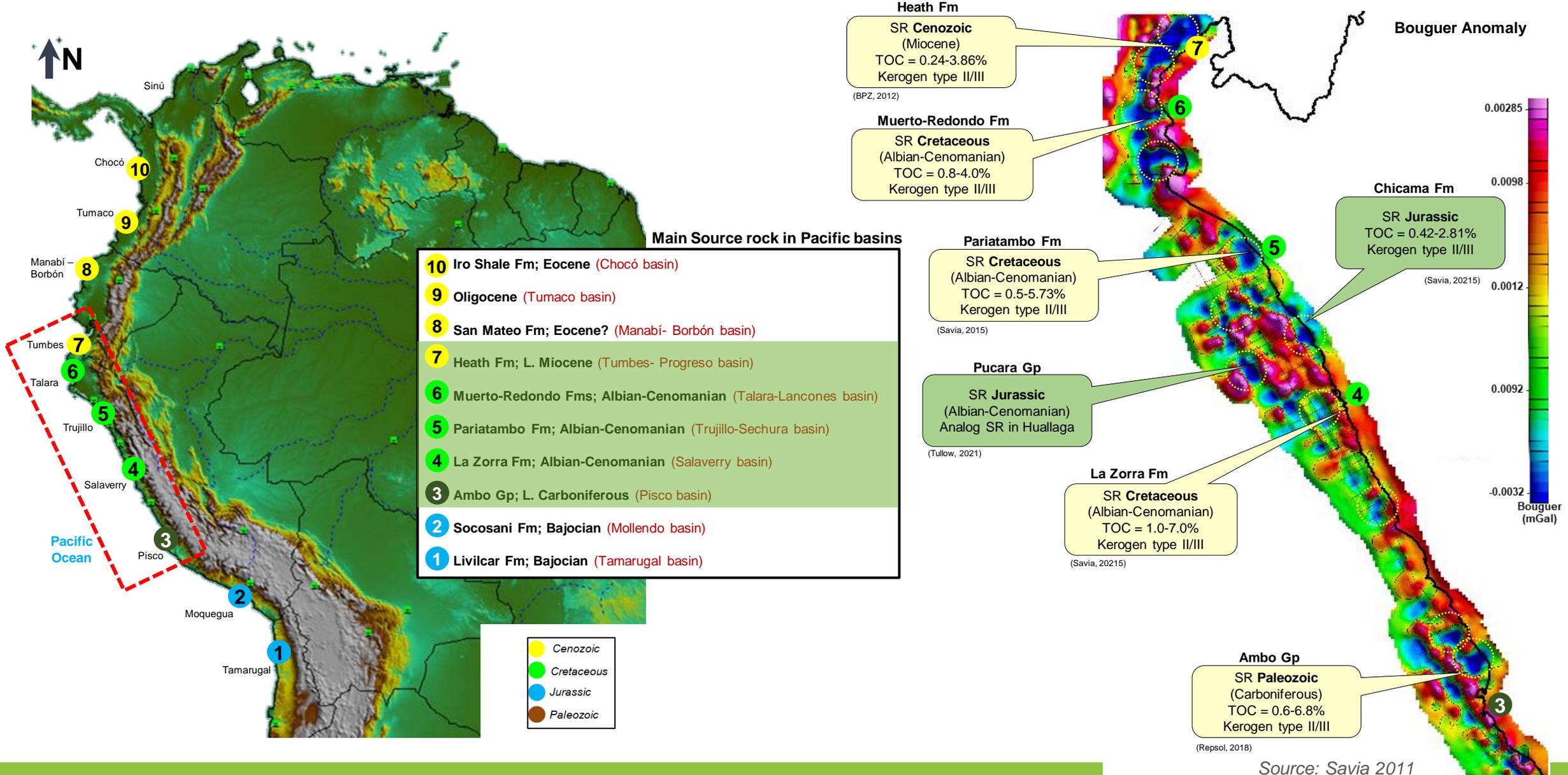
Light Oil area – Salaverry and Trujillo Basin

STRUCTURAL STYLES

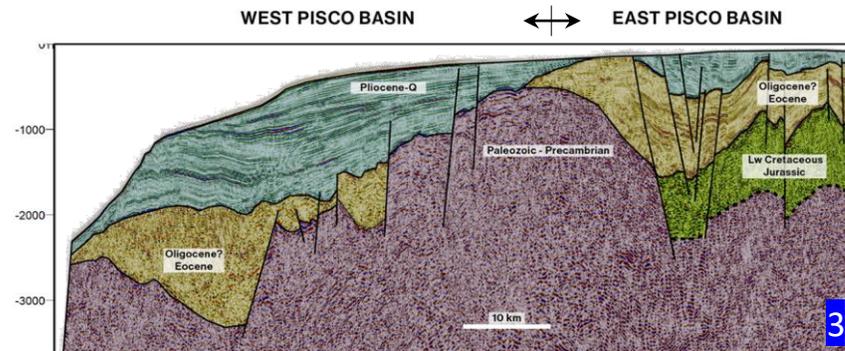
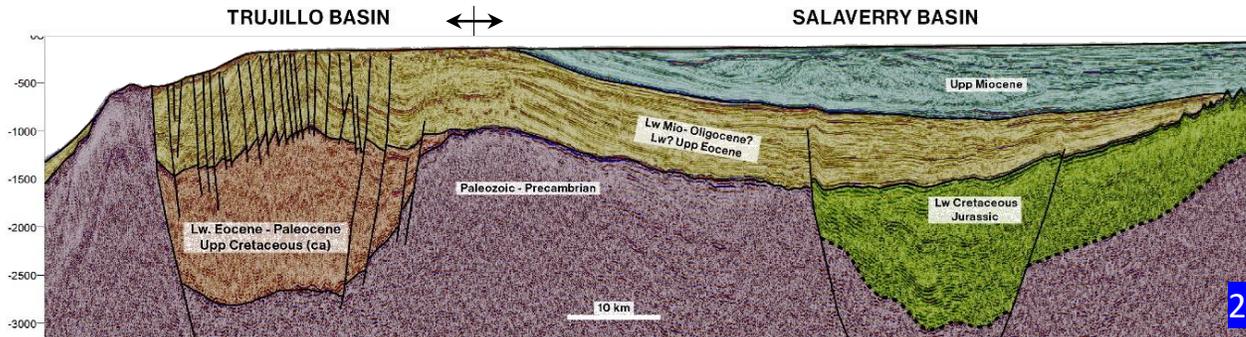
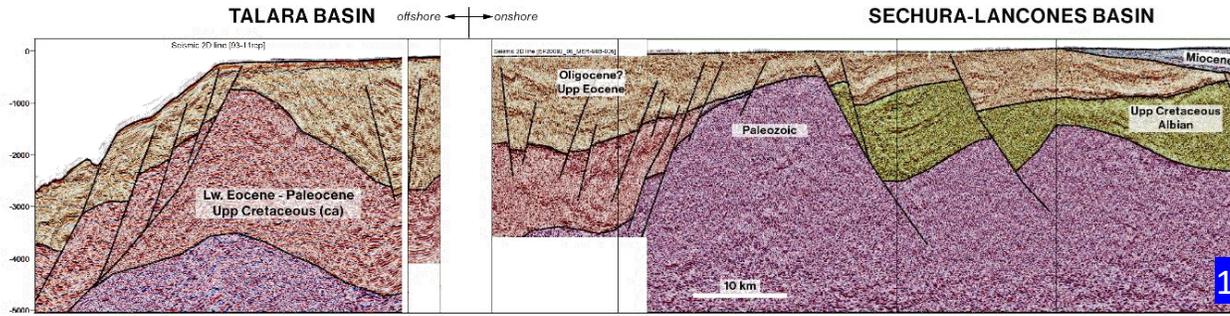


Atlas of the Peruvian Subandean Basin Petroleum System, 2019

SOURCE ROCKS IN OFFSHORE



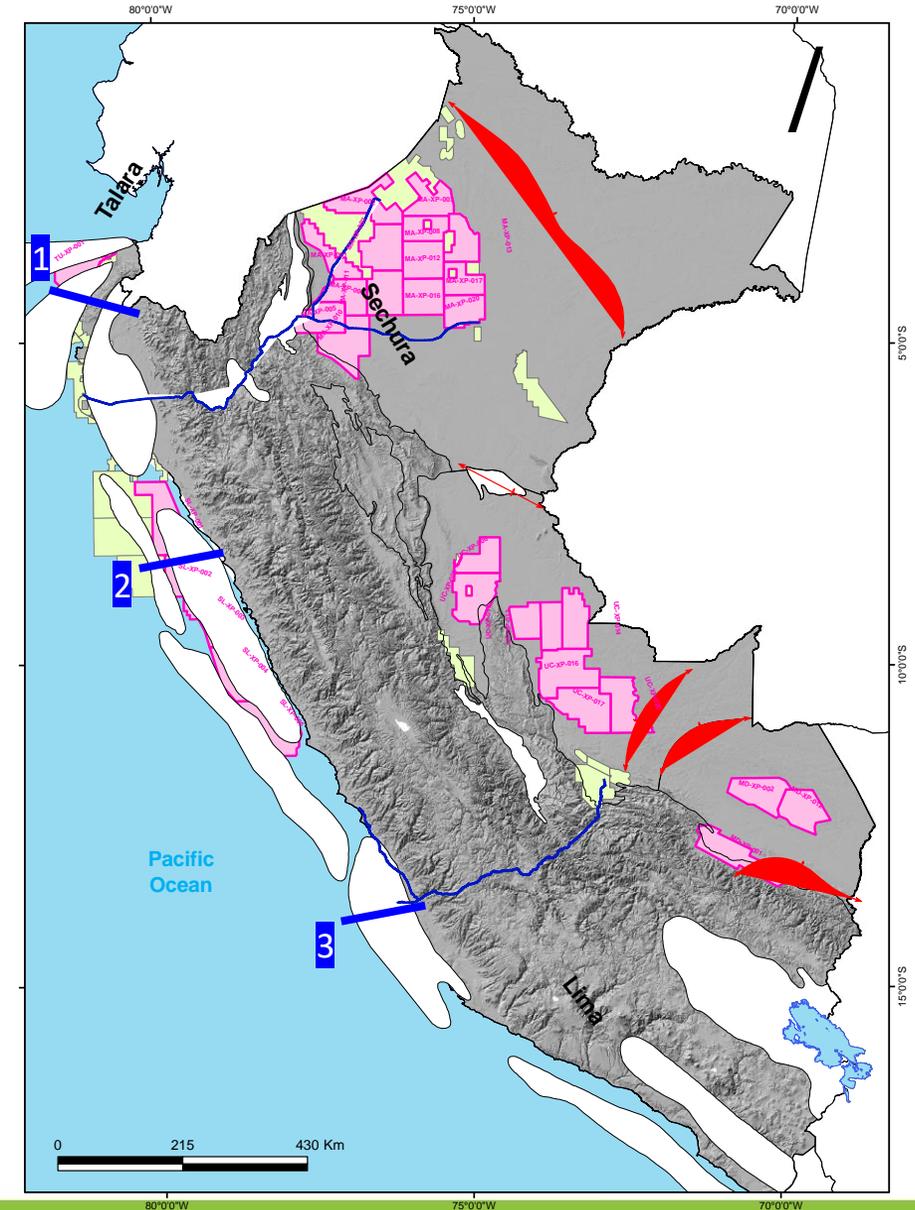
STRATIGRAPHY AND STRUCTURAL FRAMEWORK



PRE-ANDEAN domain
with a lower domain with depocenters probably filled for rocks of Mesozoic age?

ANDEAN domain
an upper domain with deposits of Cenozoic age along the platform towards to the slope

Palacios and Timoteo, 2022 (unpublished)



PROMOTION AREAS

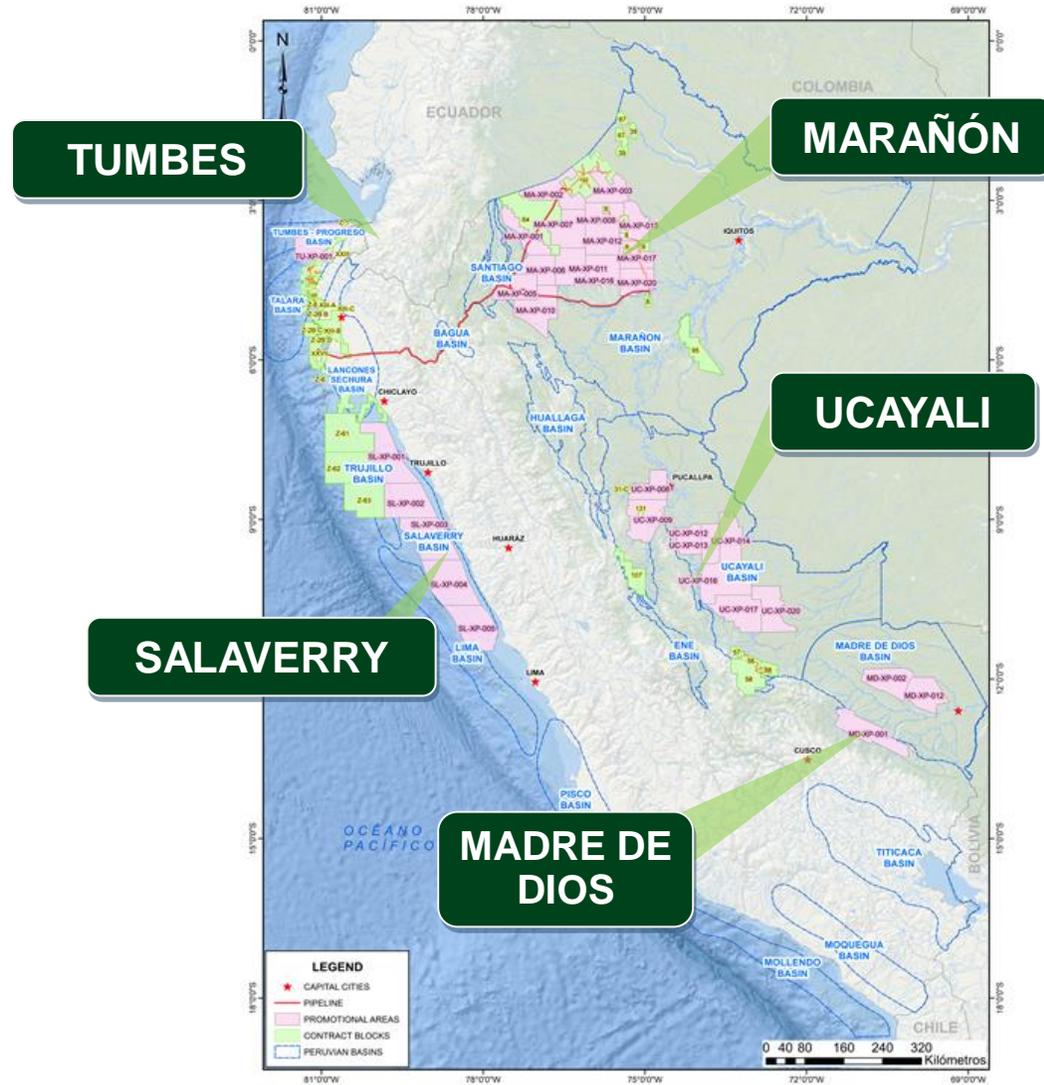
PROMOTION AREAS

PLAN OF QUICK IMPACT MEASURES

- Action plan for area contracting “2023 – 2024”.
- Area contracting mechanism.

31 PROPOSALS AREAS FOR TEA OR CONTRACTS

BASIN	# AREA
Marañón	14
Ucayali	8
Madre de Dios	3
Salaverry	5
Tumbes	1 (CET suscribed)

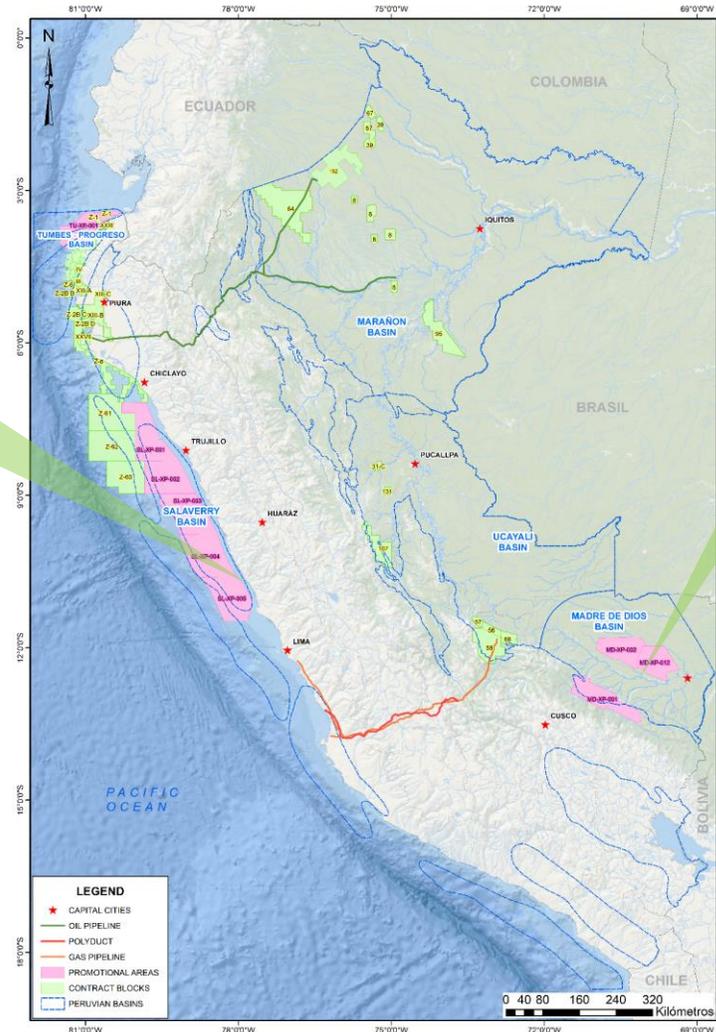


PROMOTION AREAS

TRUJILLO - SALAVERRY BASINS PROSPECTIVE RESOURCES

**Total : 646.6 MMSTB
(2U) (Unrisked)**

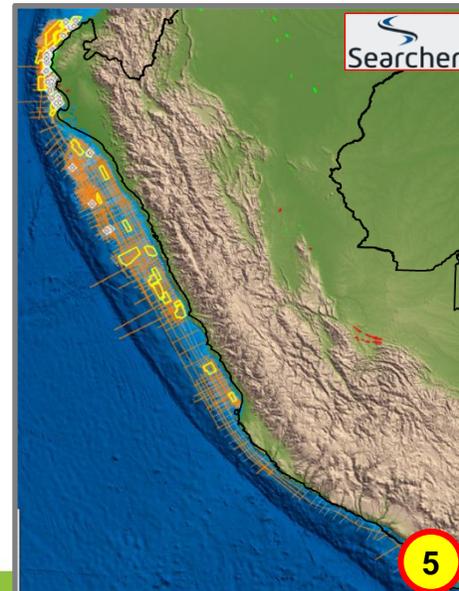
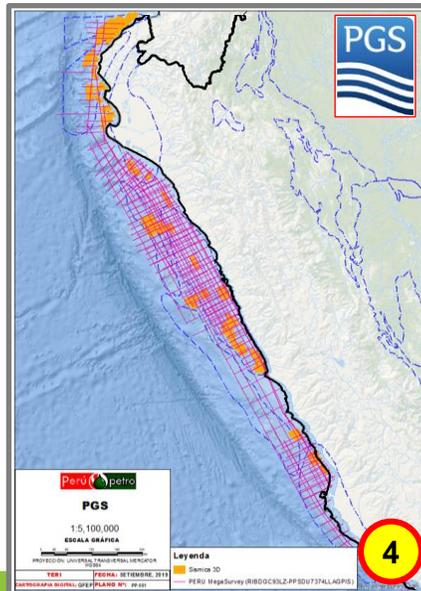
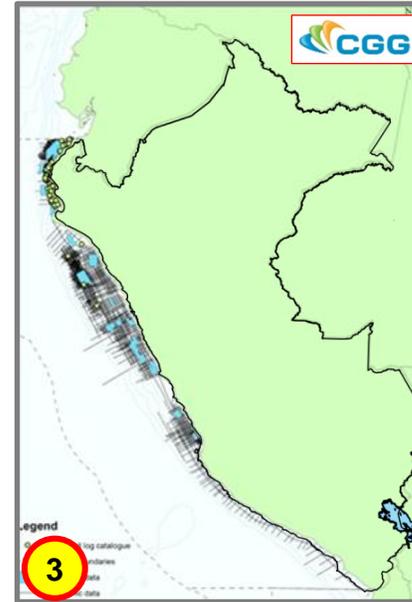
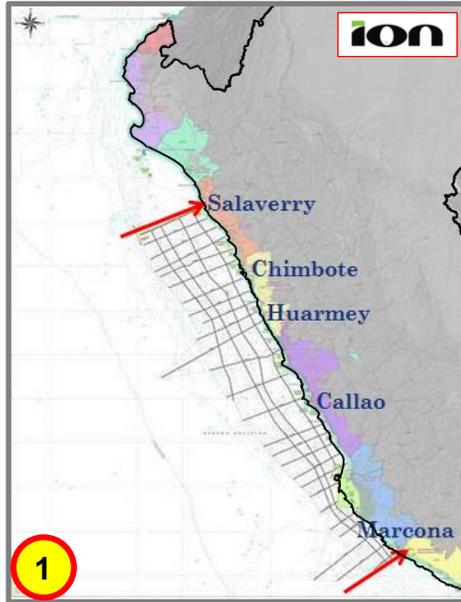
Promotional Areas: 5
Exploratory Wells : 2 (1971)
2D Seismic: 20,943 Km (1973-2011)
3D Seismic: 7,136 Km² (2008-2013)



MADRE DE DIOS BASIN PROSPECTIVE RESOURCES

**Total : 8.66 TCF +
155.56 MMSTB (Condensate)
(2U)(Unrisked)**

Promotional Areas: 3
Exploratory Wells: (1975-2014)
2D Seismic: 3,167 Km (1973-2010)
Magnetotelluric: 2 lines (2021)



1. ION Technology Corporation (Finished)

- Acquisition and Processing of 6,700 km of 2D seismic (2014–2015)
- Acquisition of 66,644 km of marine gravity and magnetic data

2. CGG GeoSpec

- Reprocessed >15,000 km of 2D seismic (PSTM and PSDM).
- Enhanced >64,920 km of 2D seismic.
- Bio-stratigraphic review of 4 wells.
- Geochemical database.

3. Petroleum Geo-Services

- Enhanced and merged >21,000 sqkm of 3D seismic and 23,000 km of 2D seismic.

4. SEARCHER Offshore

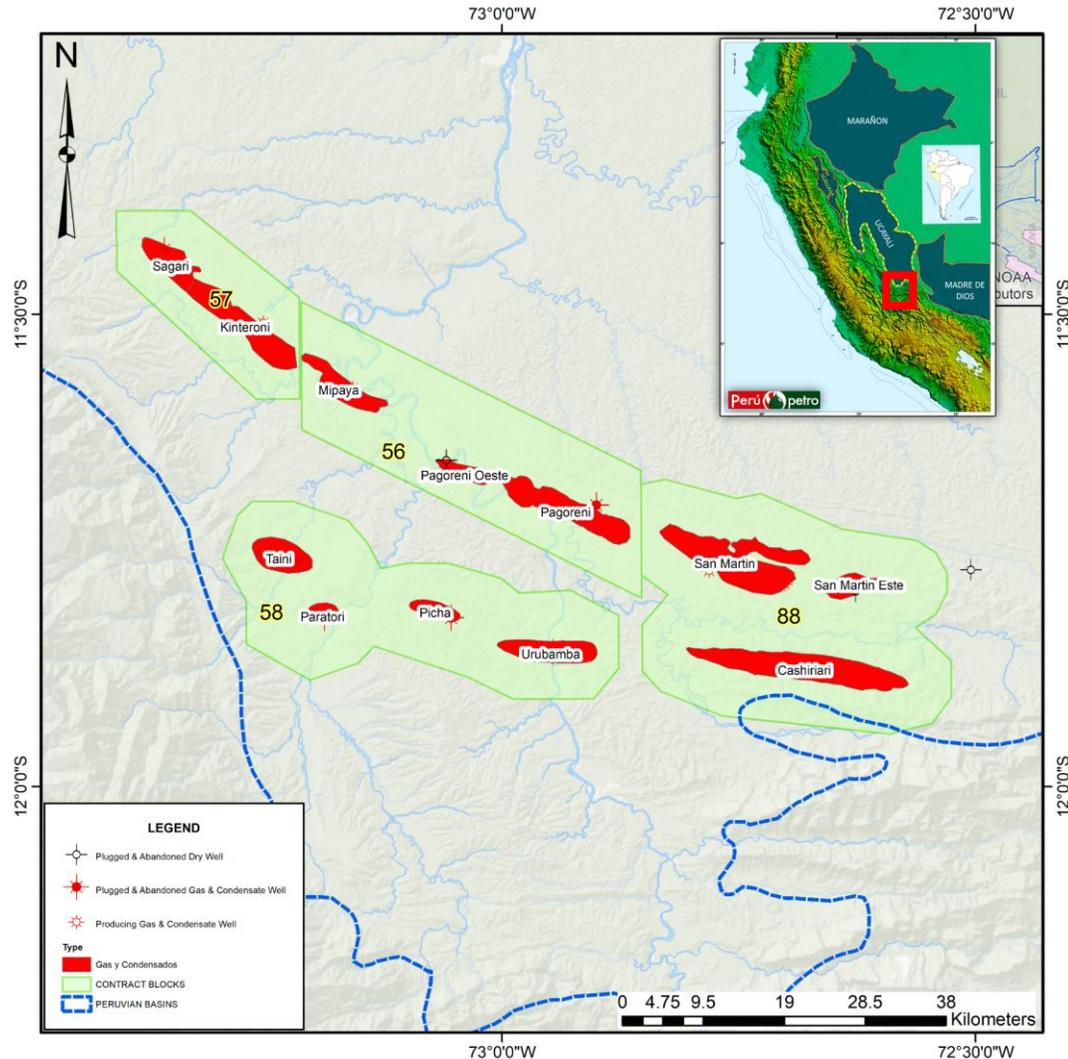
- Reprocessed in Post-stack of 49,558 km of 2D seismic and 17,540 sqkm of 3D seismic

5. TGS Offshore

- Reprocessed of 9,500 km of 2D seismic (PSDM)

6. SEARCHER Onshore

GAS RESERVES – CAMISEA REGION



GENERAL INFORMATION

- Blocks: 56, 57, 58 (*) y 88
- Cumulate production at Dic.2022: **5.67 TCF** (Gas) and **490.6 MMSTB** (LNG).
- Production 2022: **1,262 MMcfd** (Gas) and **75.8 Mbod** (LGN).

RESOURCES AND RESERVES

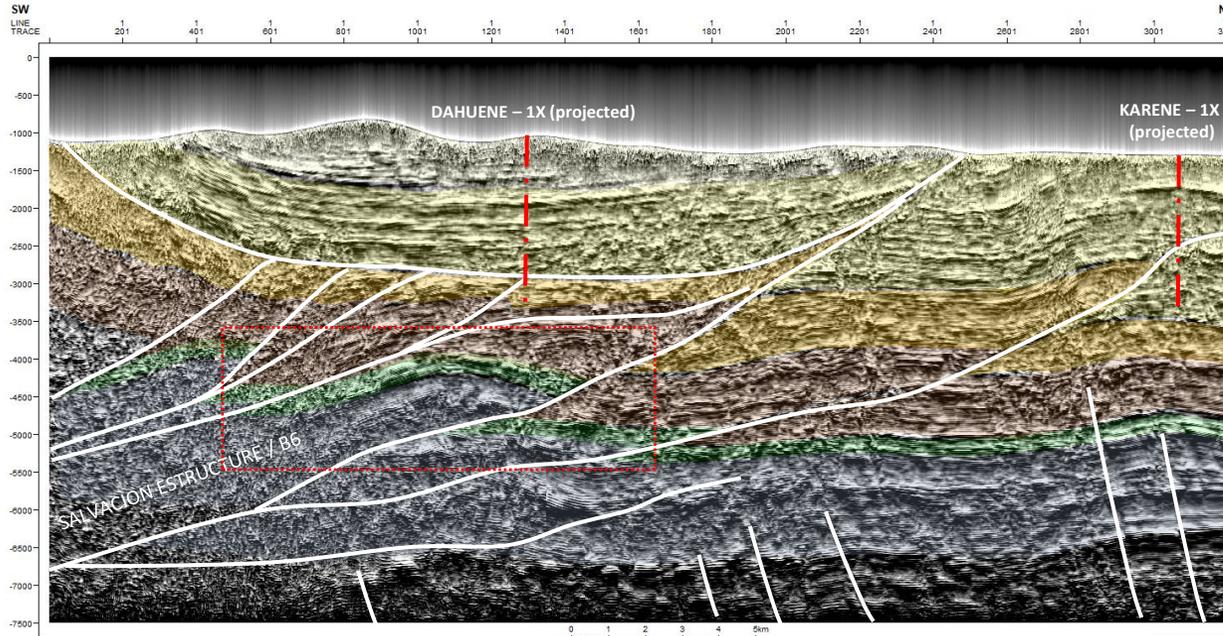
- Reserves 2P = **10.51 TCF** (Gas), **510.5 MMSTB** (LGN).
- Contingent resources 2C = **3.59 TCF** (Gas), **150.8 MMSTB** (LNG).
- Prospective resources 2U = **1.36 TCF** (Gas).

Source: MINEM 2021

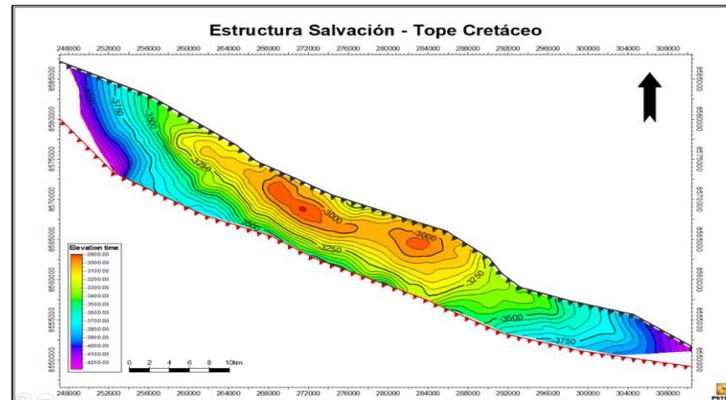
(*) Comercial Discovery at November,2016

MADRE DE DIOS BASIN – PROSPECTIVE RESOURCES

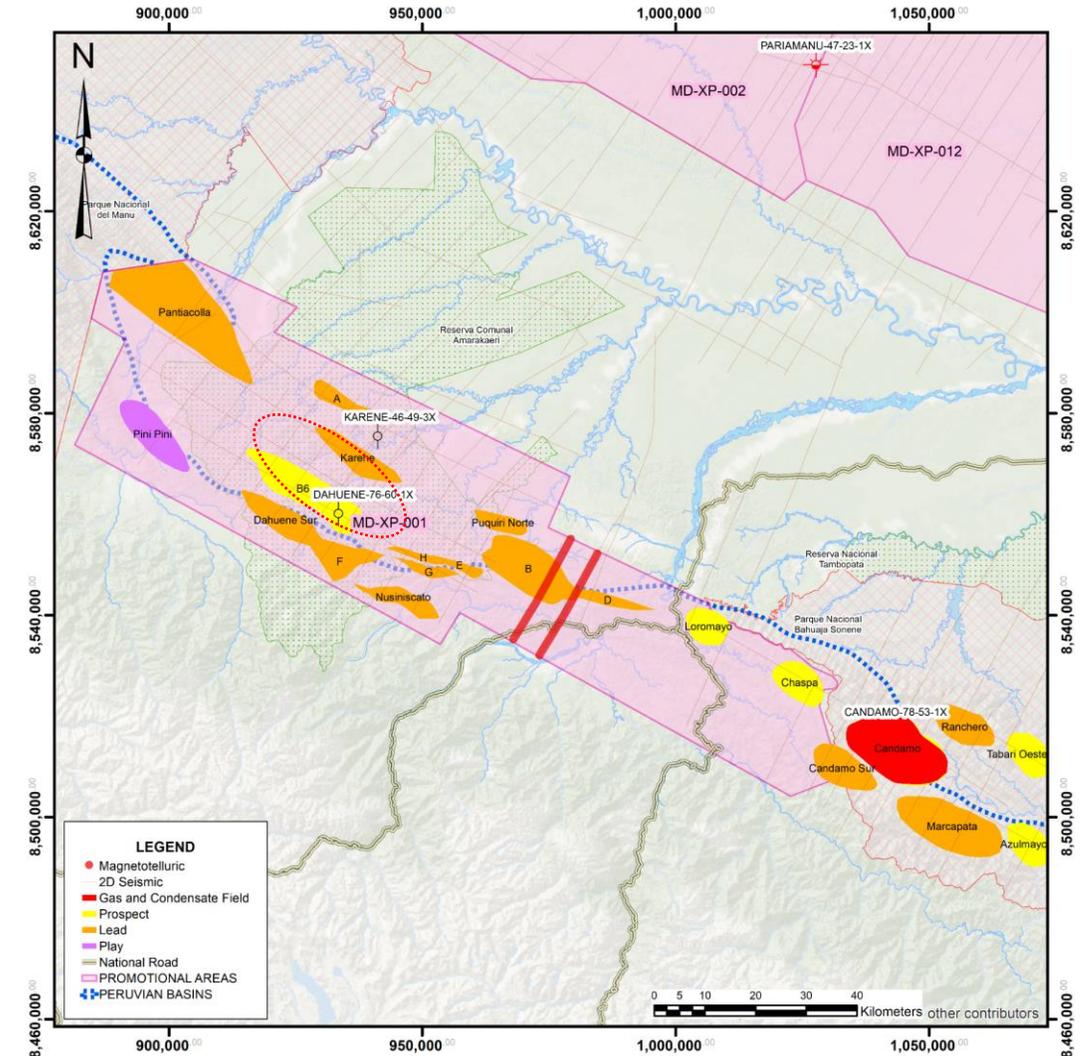
B6 Prospect



HEPC-09-06



- **Reservoir:** Cretaceous and Permian
- **Prospective Resources (2U):** 2.57 TCF and 135 MMSTB LGN



CONCLUSION



WHAT WE HAVE FOR OFFSHORE?

The only way to develop Peru's hydrocarbon potential **is by attracting investments**, through the signing of new Contracts and/or Agreements.

Improvement in the mechanism for environmental management instruments

- Accompaniment of PERUPETRO to obtain the Environmental Impact Assessment (EIA) for exploration wells
- Environmental Impact Statement (DIA) for Offshore seismic acquisition.



New Exploratory Opportunities: 31 Areas

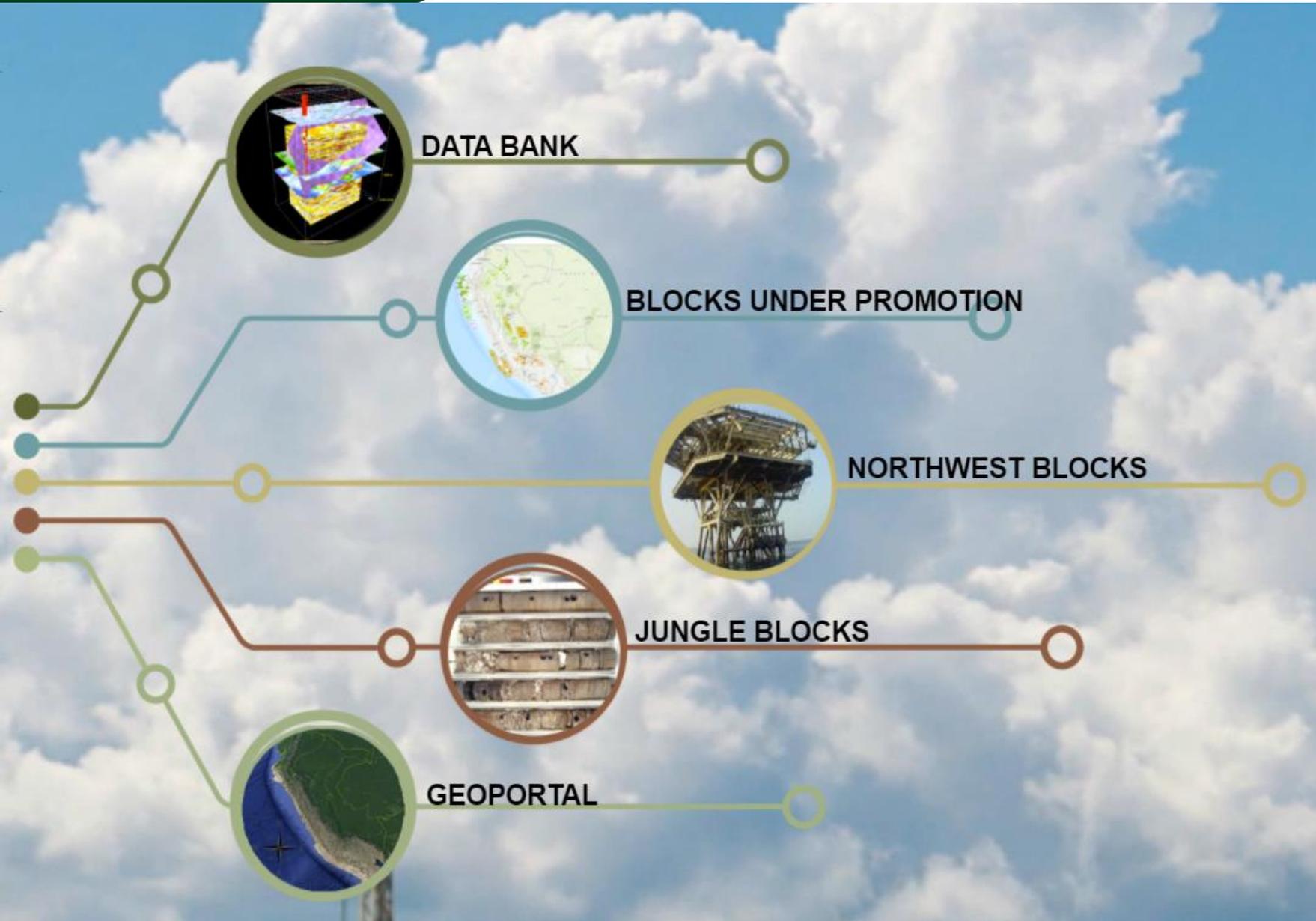
- Direct negotiation
- Available for License Contract or Technical Evaluation Agreement
- 1 area in Tumbes basin has been subscribed in August 10, 2023
- Areas with gas resources (Near to Camisea)



Exploratory Activities

- ANADARKO decided to continue to the next phase of exploration and will acquire 3D seismic in Trujillo Basin.
- Reprocessing and enhanced of 2D-3D seismic data in the Peruvian offshore through the signing of multi-client agreements with PERUPETRO.





- Information **free of cost**
- Available **Block data**
- **Multiclient data**

THANKS!