

Energy Opportunities Offshore Uruguay

Santiago Ferro, MEng MBA
E&P Administration and Contracts Manager
11 November 2021



CONTENT

- Introduction
- Open Uruguay Round: Oil & Gas E&P
- H2U Offshore: Green H₂ production from renewable energy
- Conclusions



Introduction

WHY URUGUAY?

Leader in Latin America

- Ranked #1 in LAC in Political and Social stability (Democracy, Equity, Transparency, Rule of Law, Control of Corruption, etc)
- Sustained growth and stable in the long term
- Sustained improvement of credit rating (Now: Investment Grade BBB / Baa2)
- Reliable country for foreign investment
- Leader in generation of clean energies
- State of the art connectivity
- Strategic location
- Investment promotion regime
- Free zones
- Quality of life and Social Development (Prosperity Index, Quality of Life, etc)



#1: Montevideo is the city with the best quality of life in Latin America (Mercer, 2020)



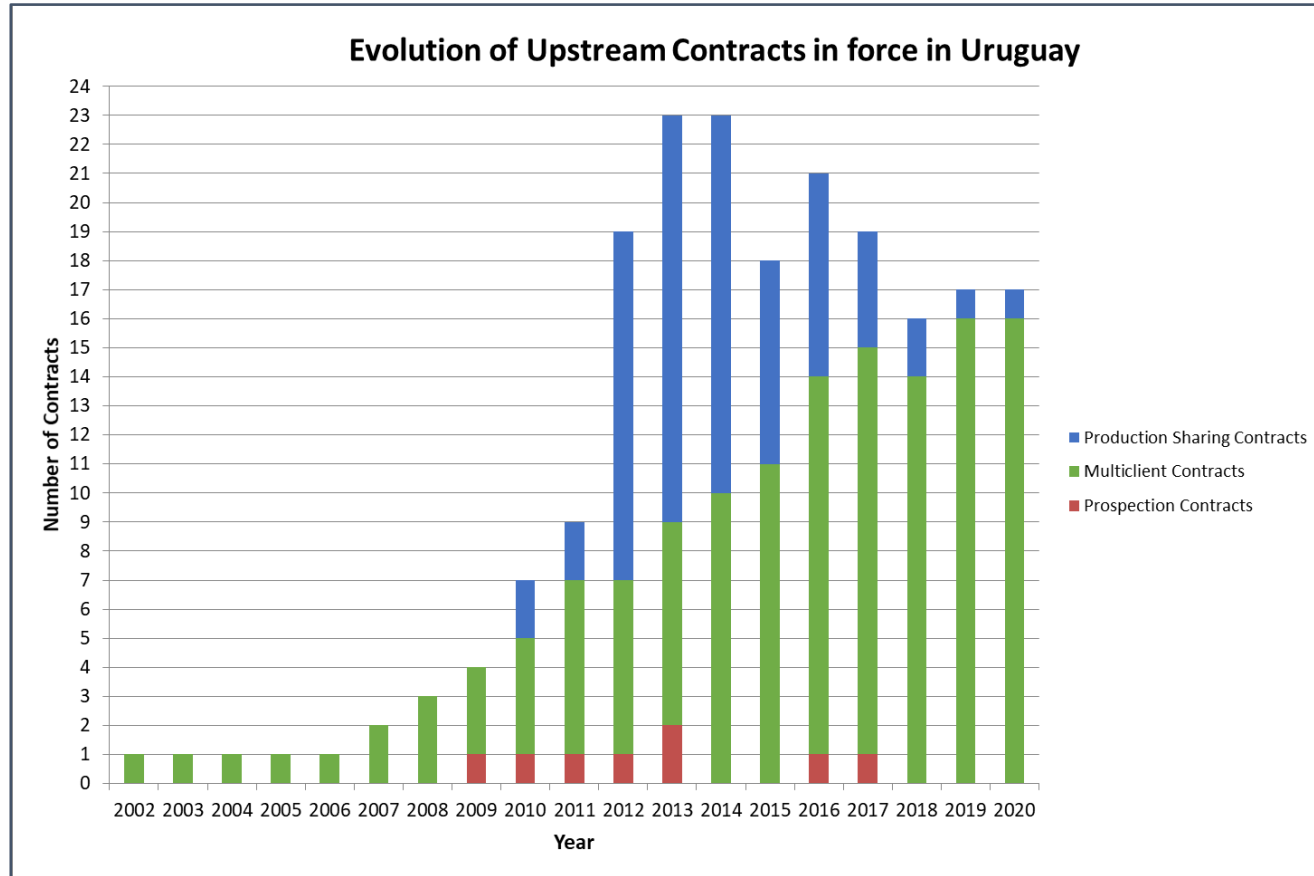
ANCAP

- Vertically integrated Oil Company
- ANCAP acts in coordination with DNE-MIEM as the “hydrocarbon agency” competent to manage the activities, business and operations of hydrocarbons industry, by itself or by third parties
- ANCAP will sign with the IOCs the Exploration-Exploitation Contract after approval and on behalf of the República Oriental del Uruguay Executive Branch
- 5 petroleum contracts approved by ANCAP’s new administration (4 already approved by the Executive Branch and 1 in process of approval)



Open Uruguay Round

TENS OF UPSTREAM CONTRACTS SIGNED IN THE LAST 14 YEARS



Over 1.2 Billion USD of investment in HC exploration by Oil & Gas and Service Companies



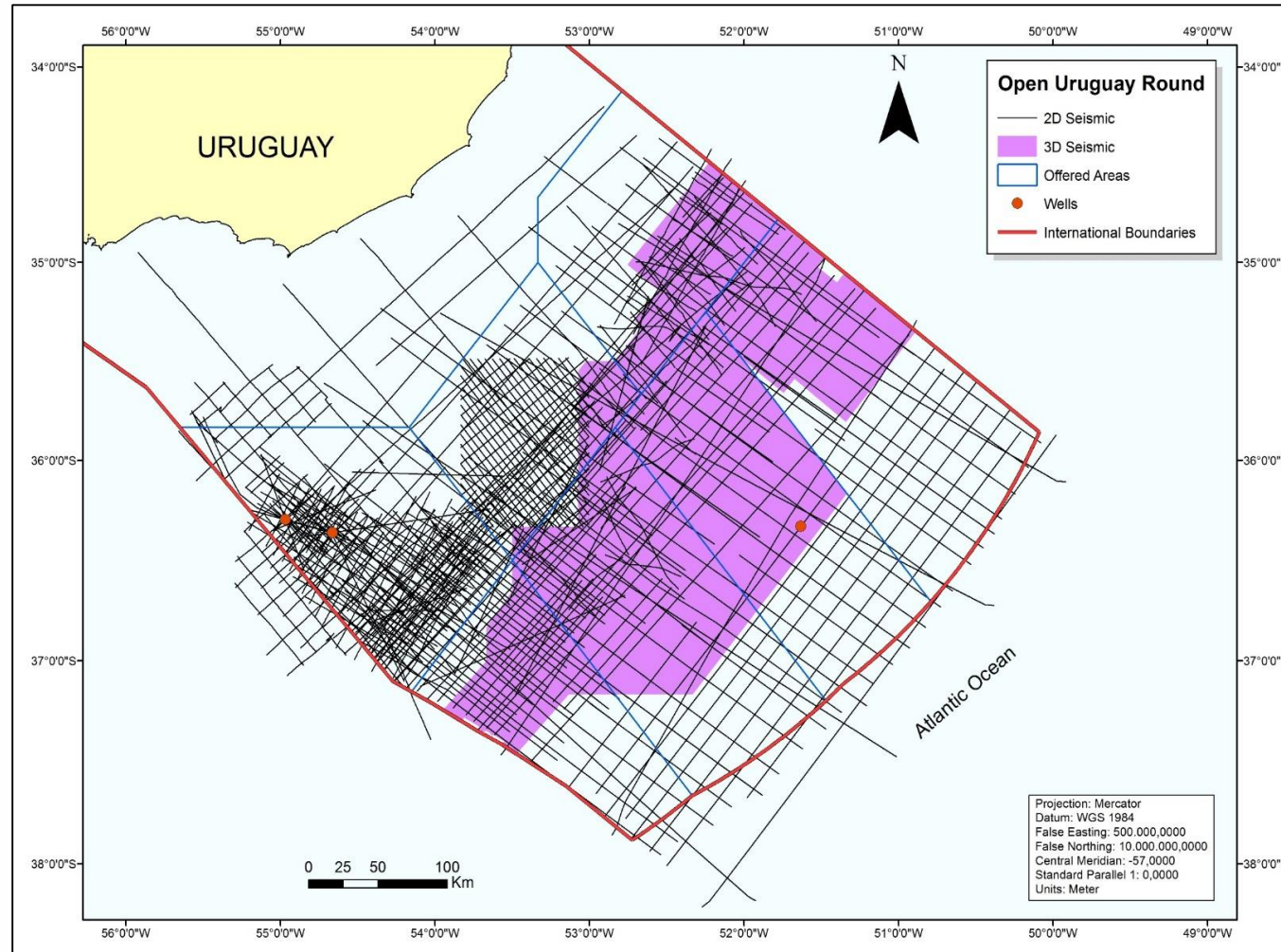
DATA HAS INCREASED TREMENDOUSLY

DATA BEFORE 2007

- 2 wells
- 13.000Km of 2D seismic

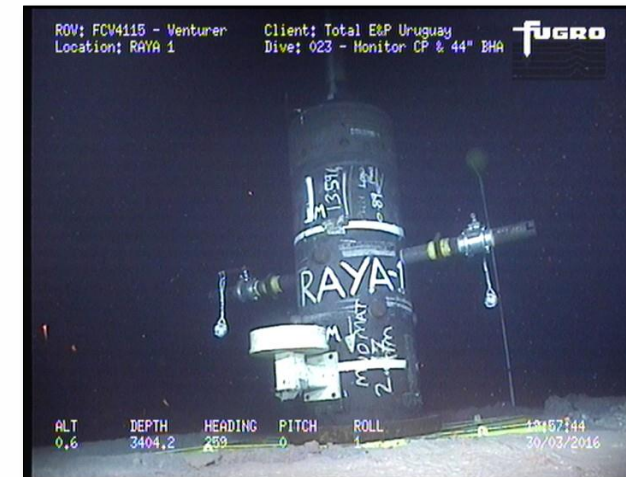
NEW DATA SINCE 2007

- 1 well
- 28.000Km of 2D seismic
- 41.000Km² of 3D seismic
- 13.500Km² of 3D CSEM
- >200 Heat flow measurements and core samples



RAYA WELL

- Drilled after 40 years
- World Record Water depth (3404 m)
- 100 days of operation: on time and budget
- Complex Logistics on Port
- Construction of Mud and Cement plants
- Imports and Exports authorized by ANCAP and DNA in coordination
- Success from operational, HSE, drilling engineering, etc. point of views



STRONG EMPHASIS ON THE CARE OF THE ENVIRONMENT



HSE management plan required by ANCAP and DINAMA to the oil companies requires the use of the industry's best practices and technologies for each exploration operation.
IE: MMO and PAM for offshore seismic



2012-13: Environmental Base Line on the EEZ, bibliographic review.

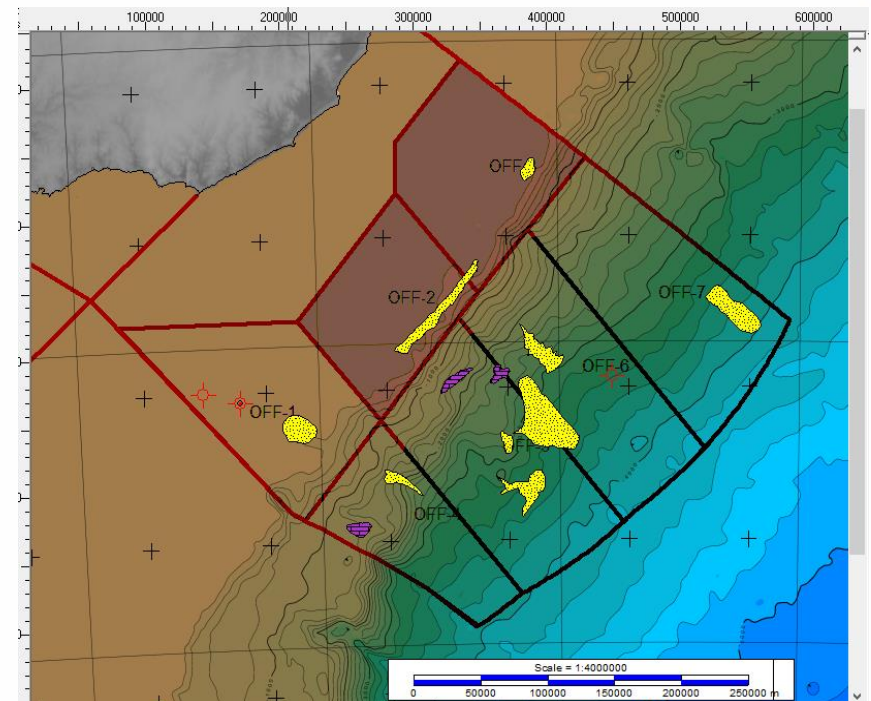
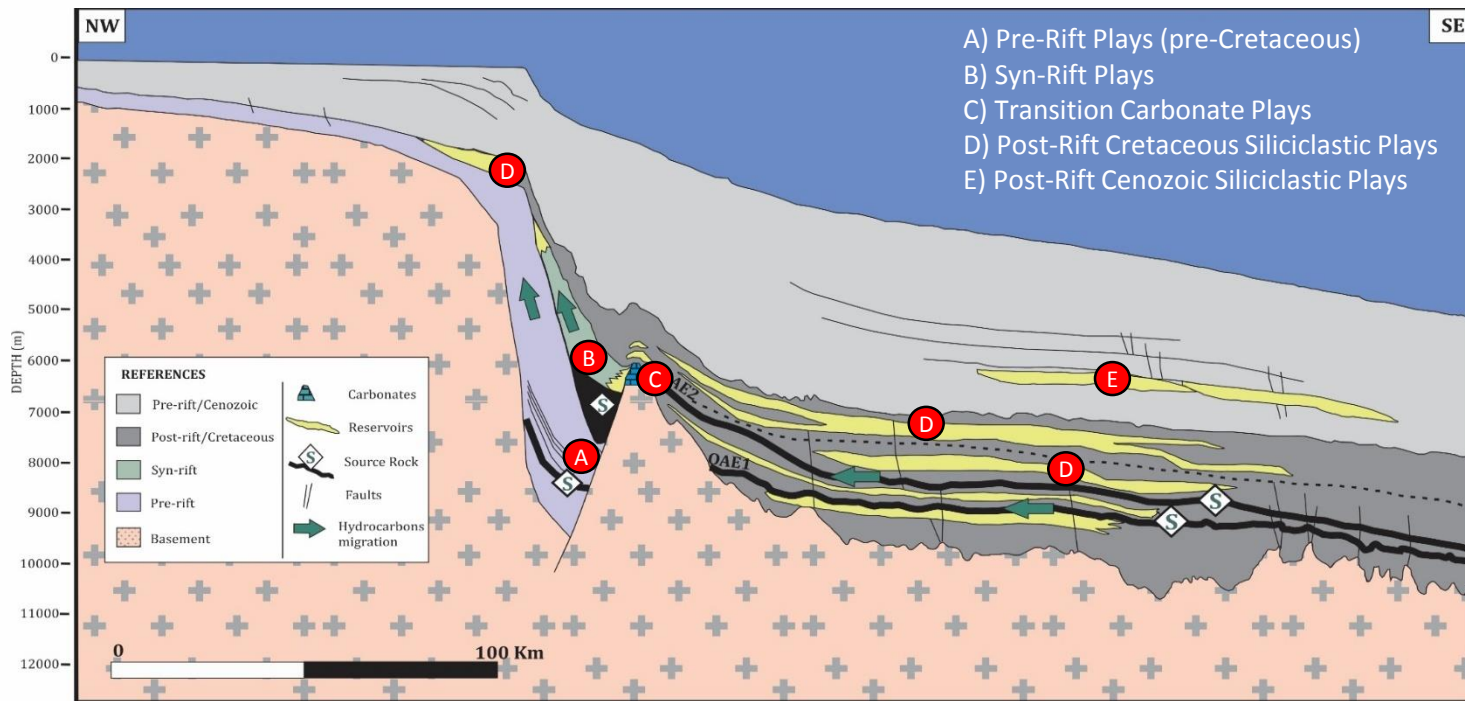


2015-16: Environmental Base Line on the EEZ, regional oceanographic campaign for the acquisition, processing and interpretation of data



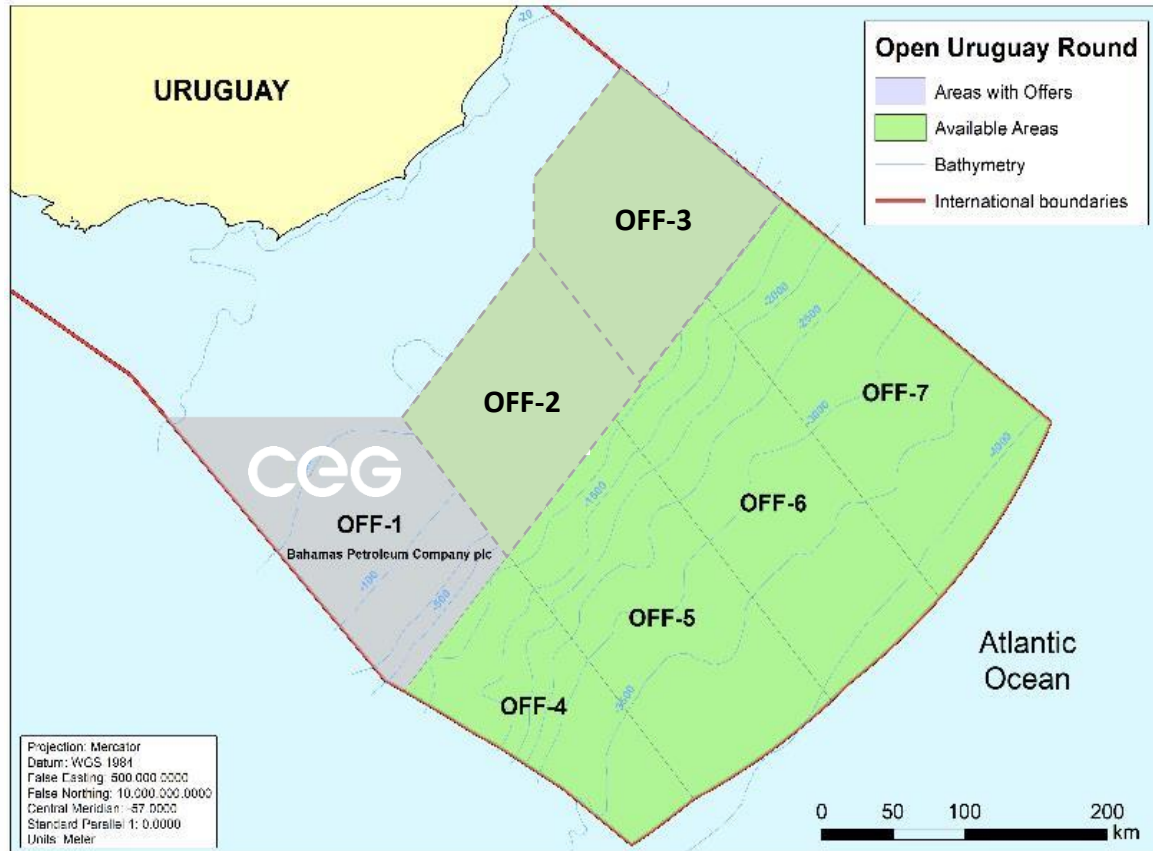
Offshore Operations Manual: ANCAP's guidelines, recommendations, requirements to design and execute the offshore exploration operations to assure their safety and environmental sustainability, in line with the international standards.

PLAY TYPES OFFSHORE



- >60 offshore prospects and leads
- From shallow to ultra-deep water depths
- different play types on all offshore basins
- Prospective resources >20,000 MMBOEs (already assessed in just 13 prospects)

OPEN URUGUAY ROUND OFFERED AREAS



Average Blocks size $\approx 15.000\text{Km}^2$

- Areas OFF-2 and OFF-3 received offers in the 1st Instance of 2019 (May) from Kosmos Energy – Kosmos withdraw offers in 2020 due to financial troubles.
- Area OFF-1 received an offer in the 1st Instance of 2020 (May) from Challenger Energy (in process of approval by Ministry of Energy and Executive Branch).
- Areas OFF-2 and OFF-3 will be available when approved by Executive Branch

MAIN FEATURES OF BIDDING ROUND TERMS

- Open door: qualification and submission of offers at any time
- Not Direct Negotiation, bidding round every semester (May and November of each year)
- Only qualified companies can offer
- Qualification and submission of offers by email and courier due to pandemic
- Companies bid: Work Program for the 1st Exploration Period, Profit Oil Split and ANCAP's Association %
- Very moderate work commitments required (G&G studies over existing data)
- In case of competition for the same area on the same semester, offers are compared with an equation and the area awarded to the highest score offer

SCHEDULE

Activity	Offers on the 1 st Instance	Offers on the 2 nd Instance
Submission of Intention Letter and documents for the Qualification of Oil Operations Companies	Until the last working day of April	Until the last working day of October
Notification of Qualification of Oil Operations Companies	Until the penultimate working day of May	Until the penultimate working day of November
Submission of Offers	Until the last working day of May, 14:00 local time.	Until the last working day of November, 14:00 local time.
Opening of Offers	Last working day of May, 14:30 local time.	Last working day of November, 14:30 local time.
Decision of ANCAP on the best proposal for each Area(*)	No later than the last working day of August	No later than the last working day of February

(*) Note: The signature of the Contract is subject to the approval by the Executive Branch

MAIN FEATURES OF CONTRACT MODEL

- Typical Production Sharing Agreements for which Contractor assumes all risks, costs and responsibilities of the activity.
- Term: 30 years; Exploration: 10 or 9 years; Exploitation: 25 years
 - First Exploration Period: **Committed Exploratory Program**
 - Companies could have an area for 6 years without committing a well
- Contractor's Economy
 - Cost Oil Contractor (CAPEX and OPEX)
 - **Profit Oil Contractor**
 - **Profit Oil Uruguayan State**
 - Profit Oil subject to Income Tax 25%
- ANCAP's Association Option
 - ANCAP's right
 - **Limit of ANCAP's association is biddable**
 - Exercised after there is a commercial discovery
 - ANCAP is only carried through exploration

Items in **bold** are biddable, so IOCs control the Risk and Reward values of the equation



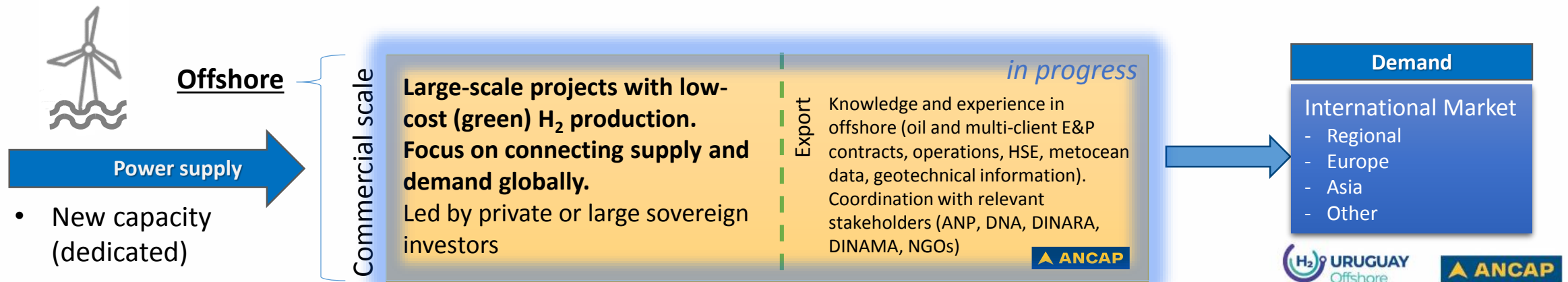
H₂U Offshore

H₂U OFFSHORE: ANCAP'S VISION FOR A SUSTAINABLE FUTURE

- ANCAP invites energy companies interested in carrying out feasibility studies and potential installation of infrastructure for the production of green hydrogen from offshore renewable energy, at their own cost and risk entirely.

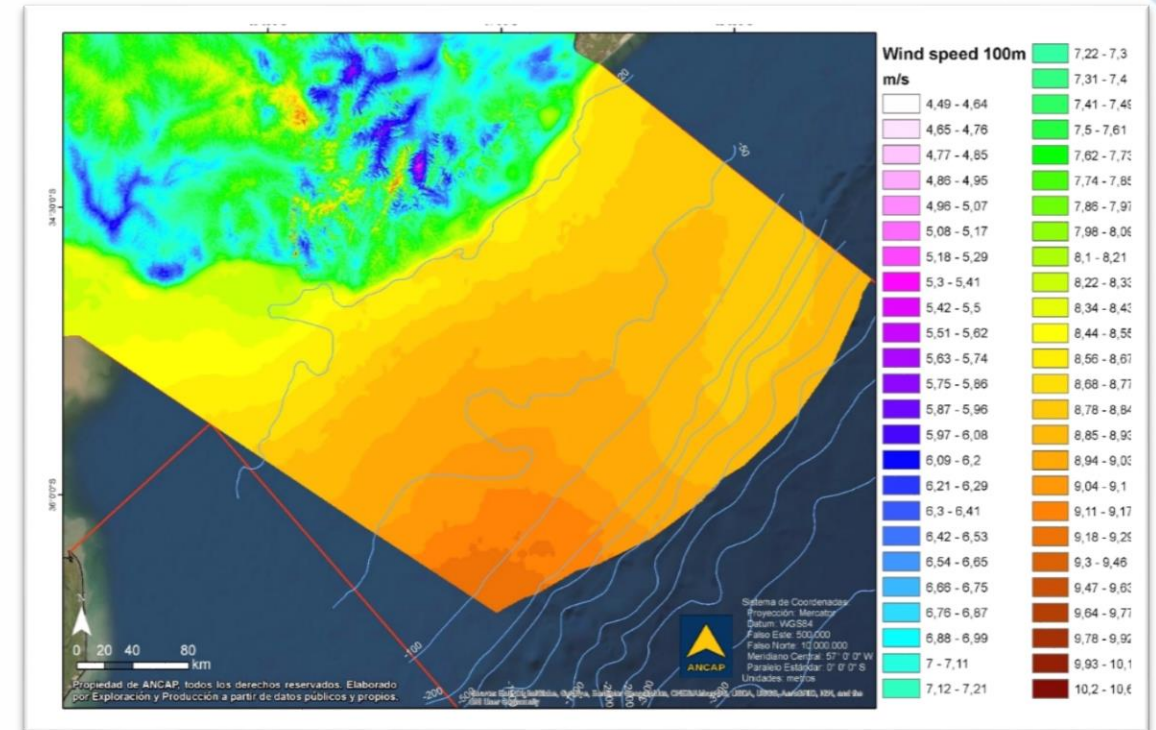


<https://www.offshore-energy.biz/tractebel-developing-wind-to-hydrogen-offshore-platform>



EXCELLENT CONDITIONS FOR OFFSHORE HYDROGEN DEVELOPMENT IN URUGUAY

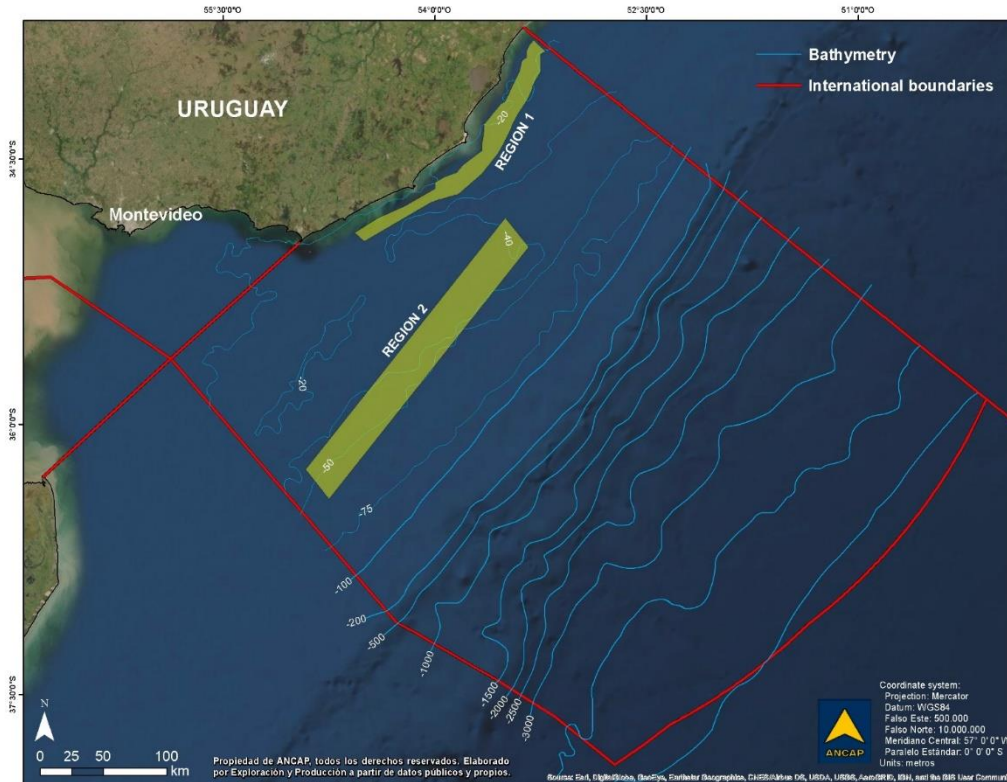
- Large offshore potential
 - Excellent Wind Conditions
 - Large Technical Potential (275 GW)
 - High capacity factors (> 55%)
 - Availability of large areas
- In addition:
 - Successful first energy transition (power sector)
 - Strong drive from the Government for the second energy transition, one of whose pillars is green hydrogen
 - Country stability and reputation
 - Good inter-institutional coordination
- Offshore hydrogen bidding round
 - Timely and innovative, first mover
 - Aimed at capturing high market interest in investments in clean energy



Wind speed at 100 m height

- Between 8.5 and 9.5 m/s in annual average (up to 1000 m water depth).
- Slight increase towards south
- Much better quantity, quality, and uniformity than onshore

PROPOSED REGIONS



E&P ANCAP

- Criteria for region selection:
 - Favorable conditions for existing wind technologies
 - Minimal environmental and anthropic interference
 - Artisanal fishing
 - Coastal protected areas
 - Safe navigation channel
 - Industrial fishing areas cat. A and B
- Region 1:
 - Water depth: 10-30 m
 - Distance to the coast > 10 km
- Region 2:
 - Water depth < 50 m
 - Distance to coast > 100 km
- Offering 8 to 16 blocks (up to 30 m depth in territorial waters and up to 50 m in EEZ)

PROMOTION SCHEDULE AND DRAFT BIDDING ROUND TERMS

ANCAP invites energy companies interested in carrying out feasibility studies and potential installation of infrastructure for the production of hydrogen from offshore renewable energy, at their own cost and risk entirely.

- Period up to 8 months for data rooms and meetings for consultation with interested companies before setting definitive terms.
- Continuous system of two bidding round per year
- ANCAP defines and proposes to the Executive Branch the areas to be offered in each bidding round
- Legal, financial and technical qualification of companies to be able to submit offers)
- Award criteria based on objective and simple parameters to be offered by energy companies:
 - Work program (WU)
 - Share of profit for the Uruguayan State (P)
 - ANCAP's participation (A)
- Comparison of offers based on equation:
$$\text{Score} = 10\% \cdot (WU/WU_{\max}) + 40\% \cdot (A/A_{\max}) + 50\% \cdot (P/P_{\max})$$

DRAFT CONTRACT MODEL

H₂ PRODUCTION SHARING CONTRACT

- The contract commends the contractor to carry out feasibility studies and the potential installation of infrastructure for the production of green hydrogen from offshore renewable energy sources.
- Contractor assumes all risks, costs and responsibilities of the activity.

ANCAP'S ASSOCIATION OPTION

- **Limit of ANCAP's association is biddable**
- ANCAP's right is exercised after approval of Development Plan

CONTRACT TERM

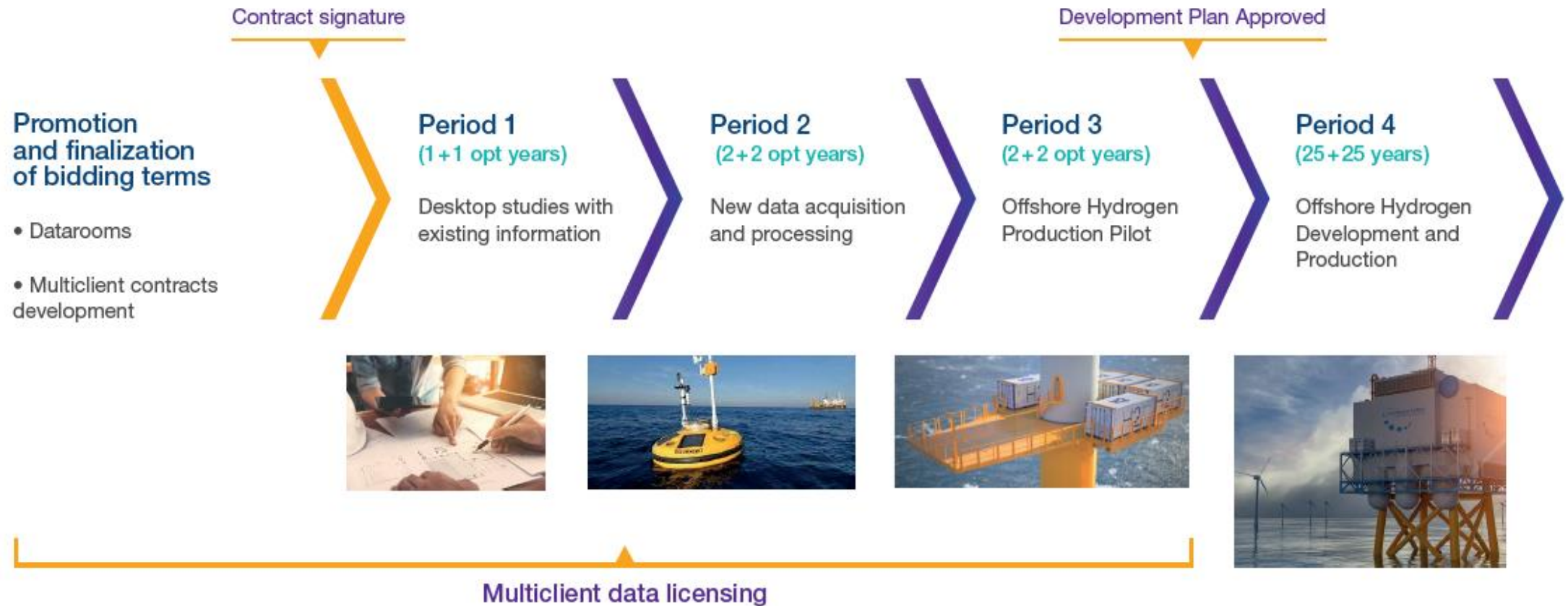
- Periods of investigation and evaluation of the resource between 2 and 10 years
- IECs carry out **Committed Evaluation Program**
- 25 years first development and production period
- Supplementary 25 years development and production period

CONTRACTOR'S ECONOMY

- Production split in 3 portions:
 1. Cost Contractor (CAPEX and OPEX)
 - Cost Recovery Limit: 80%
 2. **Profit Contractor**
 3. **Profit Uruguayan State**
- **Profit sharing** regarding an R factor sliding scale
- Profit subject to Income Tax 25%

Items in orange are biddable, so IECs control the Risk and Reward values of the equation

PROMOTION SCHEDULE AND CONTRACT TERMS



Advancing from one Period to the next is the company's right
ANCAP has the exclusive right to grant extensions options for periods 1, 2 and 3.

TENTATIVE SCHEDULE

ROUND #	DATES	ACTIVITY
N° 1	November 2021 - May 2022	Review of draft bidding round terms and contract model
		Start datarooms, meetings and Roadshows
	May 2022	Final version of bidding round terms and contract model
	June 2022	Launch of H ₂ U Offshore bidding round
	October 2022	End of qualification period for companies
	November 2022	Deadline for submission of offers
	Up to April 2023	Contract signature

Continuos (ongoing) bidding rounds: May and November of each year

Conclusions

WEB PAGE:

<https://exploracionyproduccion.ancap.com.uy/>

- Geological information about Uruguayan offshore and onshore basins
- Available E&P database
- Bidding Round terms
- Map of offered areas
- Posters
- Contract Models
- Contact information
- Presentations
- Spreadsheet for comparison of offers
- VIRTUAL DATA ROOMS
- H₂U Project web page will be available soon



CONCLUSIONS

- Uruguay is a reliable and stable country, leader in generation of clean energies; above ground risks minimized
- Open Uruguay Round already in place and starting to show results
 - Huge available database, reducing exploratory risks
 - 6 offshore areas offered in Open Uruguay Round for the 1st Instance of 2022
 - Very large areas with several leads and prospects each
 - Excellent opportunity to acquire an asset with extremely low exploratory program requirements, good bidding round and contract terms
- Also ANCAP is promoting green H2 offshore production
 - Official bidding round terms and contract model by June 2022
- Synergies between the two projects for energy companies

THANK YOU FOR YOUR ATTENTION!

Contact us at: sferro@ancap.com.uy; h2uoffshore@ancap.com.uy; rondauruguay@ancap.com.uy