

Development & Selection of a Power to Liquids/eFuels Project in Uruguay: Public Information



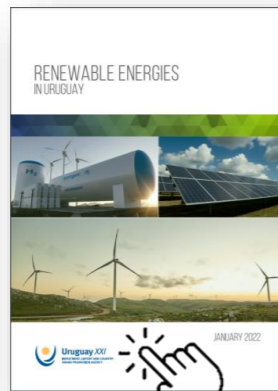
All what you need to de-risk your eFuels Project in one place and with a trustworthy partner: ANCAP in Uruguay.

- High renewable energy generation potential and resource complementarity
- Availability of **biogenic CO₂**, biomass and water due to the geographical advantages
- A 97% renewable electricity matrix to **hybridize your power system**
- Developed **logistics for exportation** projects through the Atlantic Ocean.
- Political, institutional and legal stability
- Government commitment

Explore the opportunity in three clicks



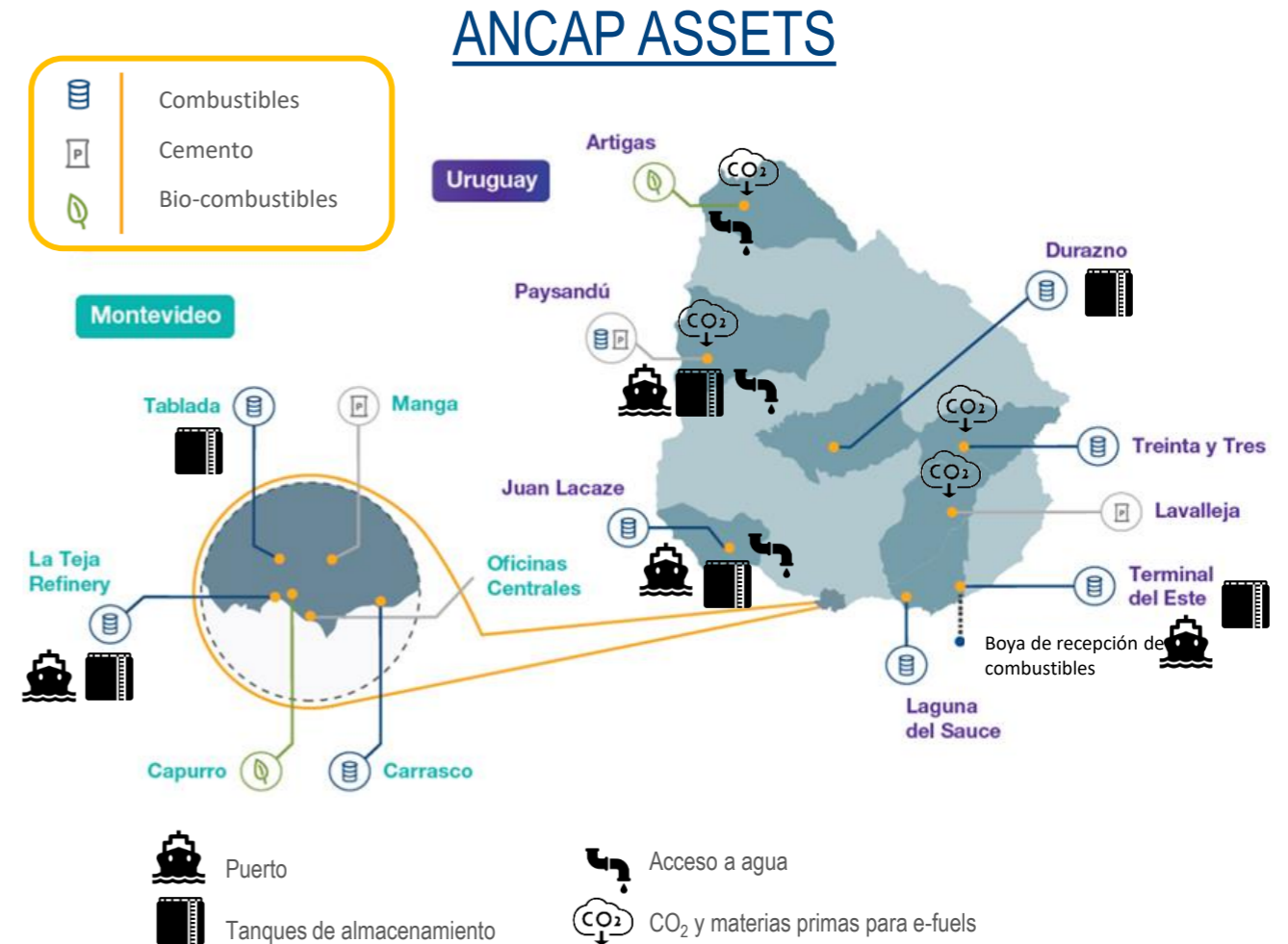
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Uruguay, your destination to invest in Renewable Energy & Power-to-X

Uruguay has gained international recognition as a reliable country with high transparency. Thanks to solid political and social stability, supported by a long-established democracy and strong legal certainty. **Uruguay consistently remains at the top of the main rankings.**

#1 BUSINESS HUB IN LATIN AMERICA



Reliable Country



Gateway to Latin America



The best partner to develop businesses



Availability of talent



Better quality of life

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Uruguay #1 in LAC



Democracy Index **#1**
(Economist Intelligence Unit, 2020)



Rule of Law Index **#1**
(World Justice Report, 2020)



Low Corruption **#1**
(Transparency International, 2020)



Social Mobility **#1**
(World Economic Forum, 2020)



Civil Liberties **#1**
(Freedom House, 2021)



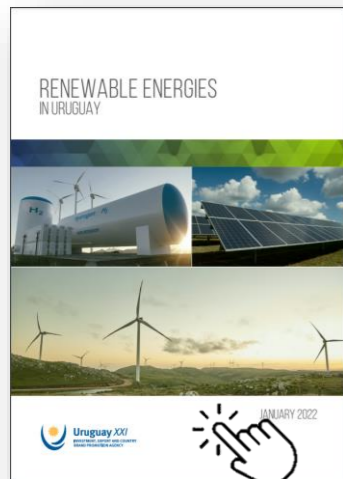
E-Government Development Index **#1**
(United Nations, 2020)

The important growth of the country over the last decade is linked to the significant increase in investment. In Uruguay, Foreign Direct Investment (FDI) has reached record levels, and has positioned the country among the main recipients of FDI, in terms of GDP in South America.

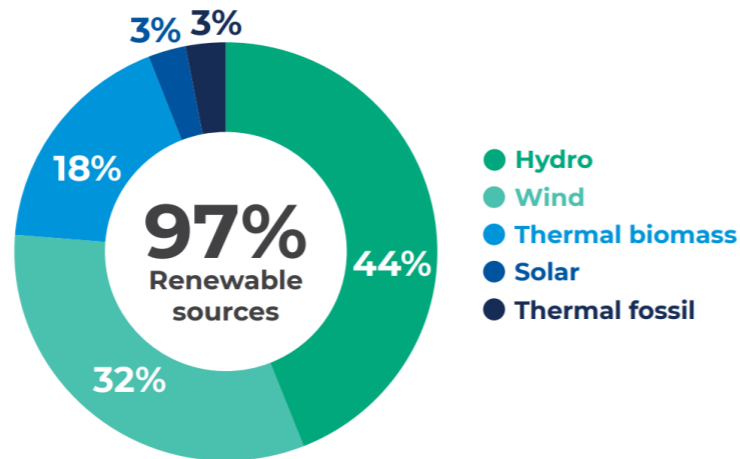
A strong power sector, with 97% RE share, ~5 GW of installed capacity and +300 GW of RE Potential

Uruguay is on a path of **strong transformation in the energy sector**, based on the definition of a long-term policy and appropriate institutional and regulatory framework. This process positions the country at **the forefront of renewable energy** use in the world. The first stage of the transformation of the energy matrix was based on a public-private partnership model, in which the public sector played the role of system coordinator and administrator of the auction scheme, generating **certainty for national and international investors**

Electric power generation in Uruguay



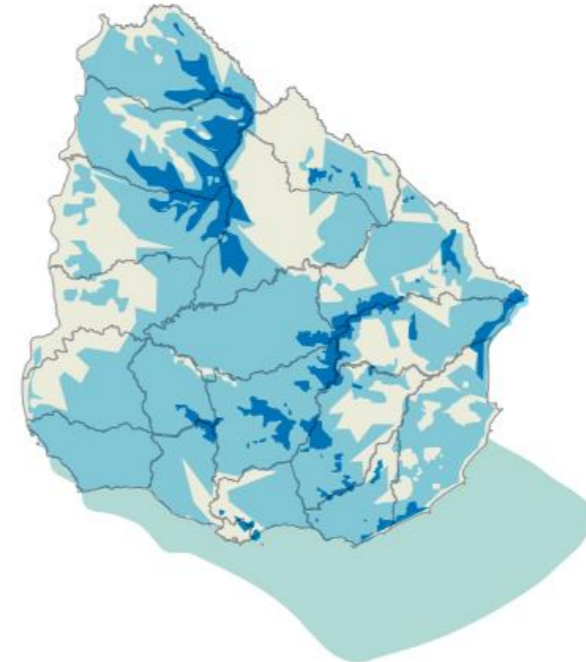
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Source: Electric power generation in Uruguay – Average for the years 2017 to 2020 (Green Hydrogen Roadmap <https://www.gub.uy/ministerio-industria-energia-mineria/comunicacion/noticias/green-hydrogen-roadmap-in-uruguay>)

Wind and Solar Potential

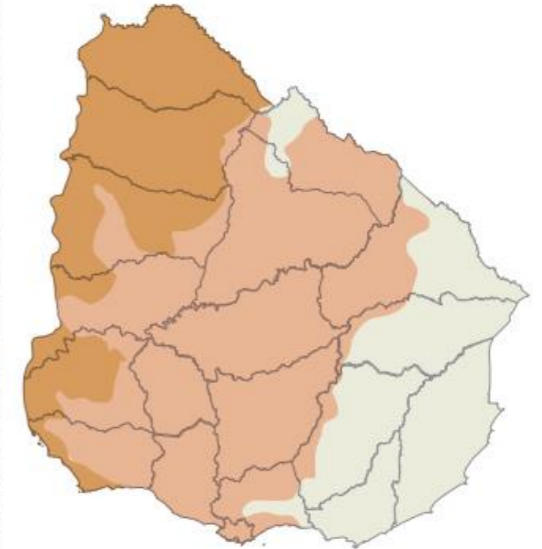
Onshore and offshore wind capacity



- Level I** | >8m/s | ~30 GWs | Total area = 17,500 km²
Assumptions: 15% of km² > ~10 MW/km²
- Level II** | >7m/s | ~50 GWs | Total area = 97,300 km²
Assumptions: 5% of km² > ~10 MW/km²
- Offshore** | 275 GW
Assumptions: 5% of km² > 20-30 MW/km²

Source: (Green Hydrogen Roadmap <https://www.gub.uy/ministerio-industria-energia-mineria/comunicacion/noticias/green-hydrogen-roadmap-in-uruguay>)

Solar photovoltaic capacity



- Level I** | ~60 GWs
Total area = 31,500 + 6,500 = 38,000 km²
- Level II** | ~135 GWs
Total area = 81,400 km²

Six reasons to develop a Hydrogen and eFuels project in Uruguay

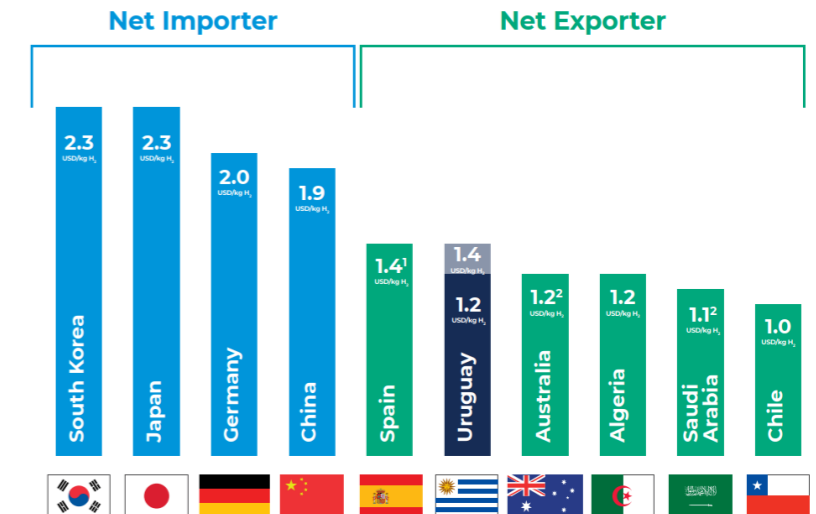
Uruguay has important competitive advantages to be a relevant producer of green hydrogen and derivatives, both for the local market and for export.

According to its Green Hydrogen Roadmap (launched in 2022), the costs of renewable energies would allow Uruguay, by 2030, to reach green hydrogen production values (LCOH) between 1.2 and 1.4 USD/kgH₂ for a scale above 500 MW. These production **costs would allow Uruguay to position itself competitively among net exporters** such as Chile, Saudi Arabia, Oman, Namibia or Australia.

1. High renewable energy generation potential and resource complementarity
2. Availability of **biogenic CO₂**, biomass and water due to the geographical advantages
3. A 97% renewable electricity matrix to **hybridize your power system**
4. Developed **logistics for exportation** projects through the Atlantic Ocean.
5. Political, institutional and legal stability
6. Government commitment



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1. Benchmark taken from HyDeal ad for production costs at scale; excludes transportation and distribution costs.

2. Benchmark taken from Hydrogen Council projections; excludes transportation and distribution costs.

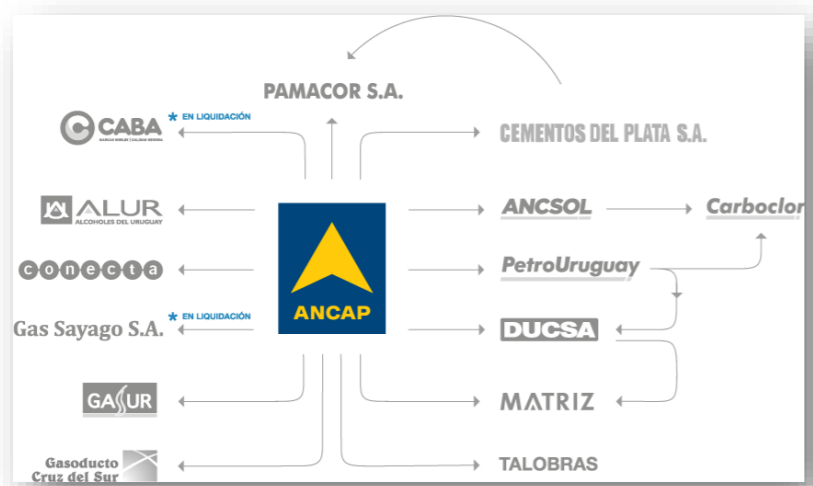
Source: Green Hydrogen Roadmap <https://www.gub.uy/ministerio-industria-energia-mineria/comunicacion/noticias/green-hydrogen-roadmap-in-uruguay>

ANCAP, a unique partner in the development of eFuels projects in Uruguay

ANCAP is a State owned diversified industrial conglomerate. Leader in the Uruguayan market of fuels, lubricants, Portland cement, and biofuels production.

Our firm contributes to the productive and social development of Uruguay and has forged part of the identity of our country.

ALUR (Alcoholes de Uruguay), a company member of the ANCAP Group, is dedicated to the sustainable agribusiness, **with a high economic and social impact** through the production of biodiesel, bioethanol, chemicals, energy and sugar.



(Click to learn more)

ANCAP MAIN ACTIVITIES

Production and trade of energetics

- Fuel
55.000 bbl/d
- Biofuel
185.000 m3/y
- Lubricants
16.000 m3/y
- Gas Stations
285
- Natural Gas

Exploration and production activities onshore and offshore



Production and trade of minerals

- Portland cement
330.000 ton
- Limestone

Five key assets of ANCAP to accelerate the development of an eFuel project

1 Premium location in Paysandú

- Biogenic CO₂ availability
- Land and water availability
- Logistics and industrial operations synergies

2 Premium locations in Montevideo Port area

- “La Teja” Refinery
- “Capurro” Industrial Hub

3 Premium location on the Atlantic Ocean

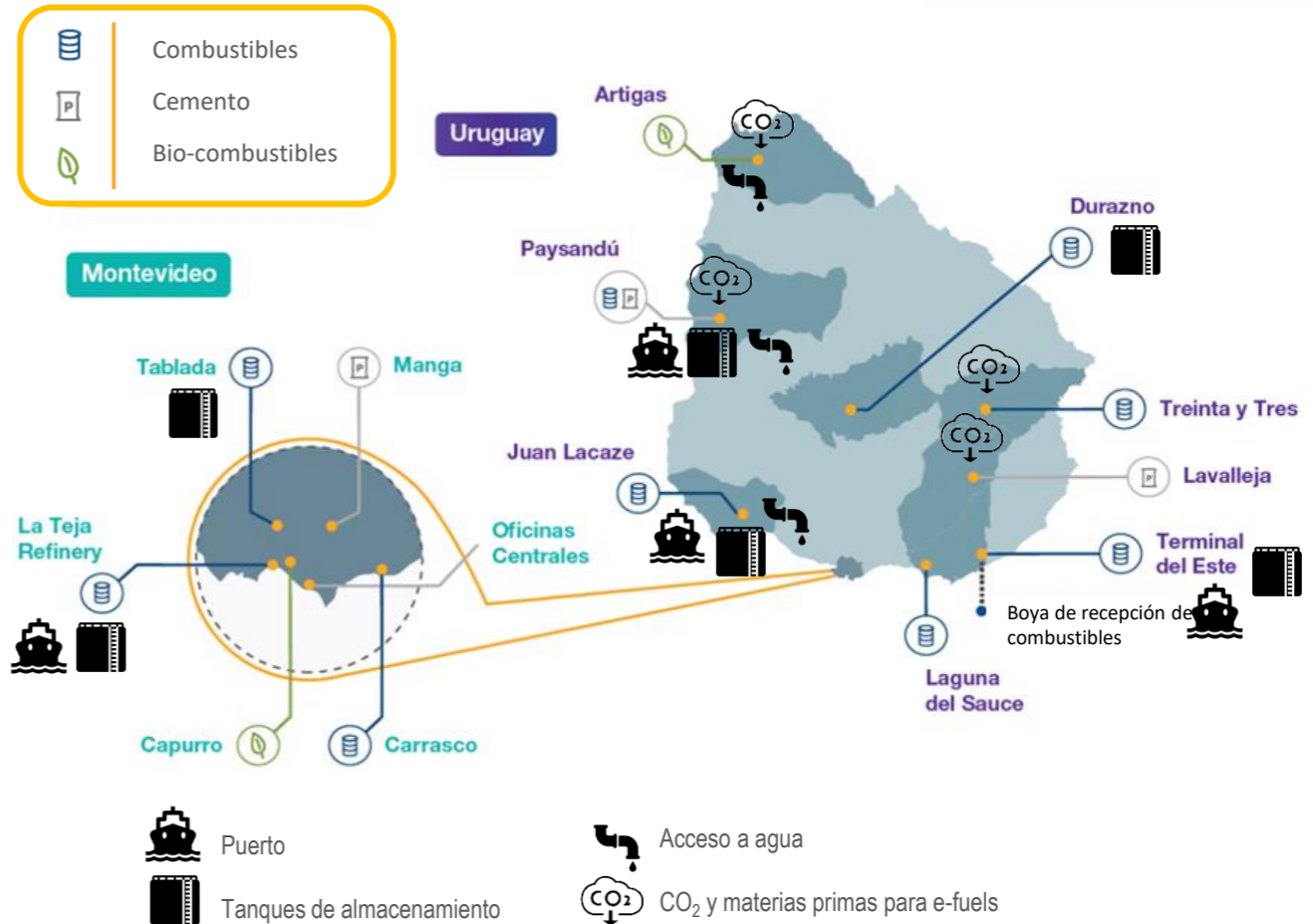
- “Terminal del Este”

4 Locations with port access

- “Juan Lacaze” on “Rio de la Plata” river
- “Paysandú” on “Uruguay” river

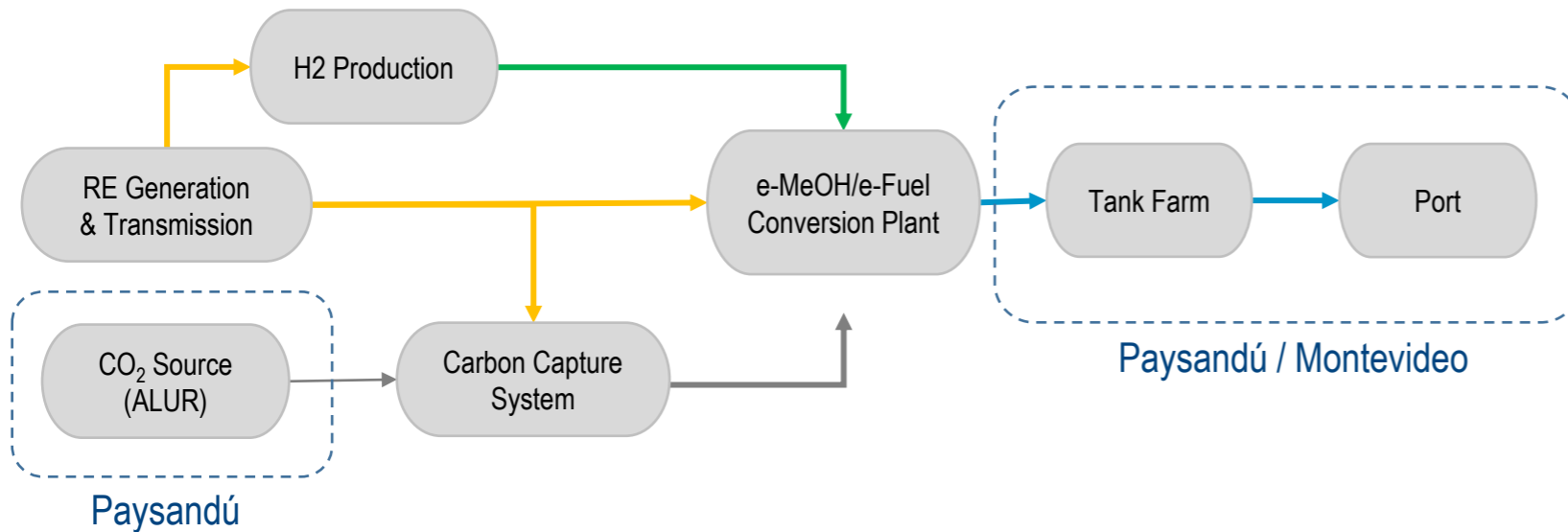
5 Experience in Hydrogen handling at the refinery

ANCAP ASSETS



A unique opportunity: ALUR will launch an Expression of Interest for eFuels Project Developers

ALUR is looking for **engaging** with private companies or consortia to develop a **Power-to-Methanol** or **Power-to-Fuel** project using ALUR's biogenic CO₂ and ANCAP's group available infrastructure assets in Uruguay.



ALUR Plant in Paysandú

Paysandú's Assets

ALUR Bioethanol Plant

- Total area **19 ha**
- Fresh water from Uruguay River.
- Biogenic CO₂ available:
 - **50.000 t/yr** from fermentation (98% V/V); and **100.000 t/yr** from biomass boilers (12% V/V)
 - Operates at **constant rate 11 months a year**, with one month (August) for planned maintenance

ANCAP's Fuel Distribution Plant

- Industrial area available: **29 ha**
- Installed **storage capacity 33.000 m³**
- Existing unloading buoy to be substituted by dolphins

New Fuels Transfer Terminal

- Already Awarded:
 - Pier without land connection, **950 m upstream the bridge**
 - **Two new 8" pipelines**
 - **Two mooring dolphins and operation center (+3,5m and +7,5m)**



Montevideo's Assets

La Teja refinery

- Reception and dispatch of clean and dirty products
- Truck and tank-car loading bays
 - **La Teja pier, Draft: 6,4 meters, Length: 180 meters**
- **Connection with future liquid terminal at Montevideo's port. (Draft 12 m)**
- Connection with ALUR biodiesel plant in Capurro via pipeline

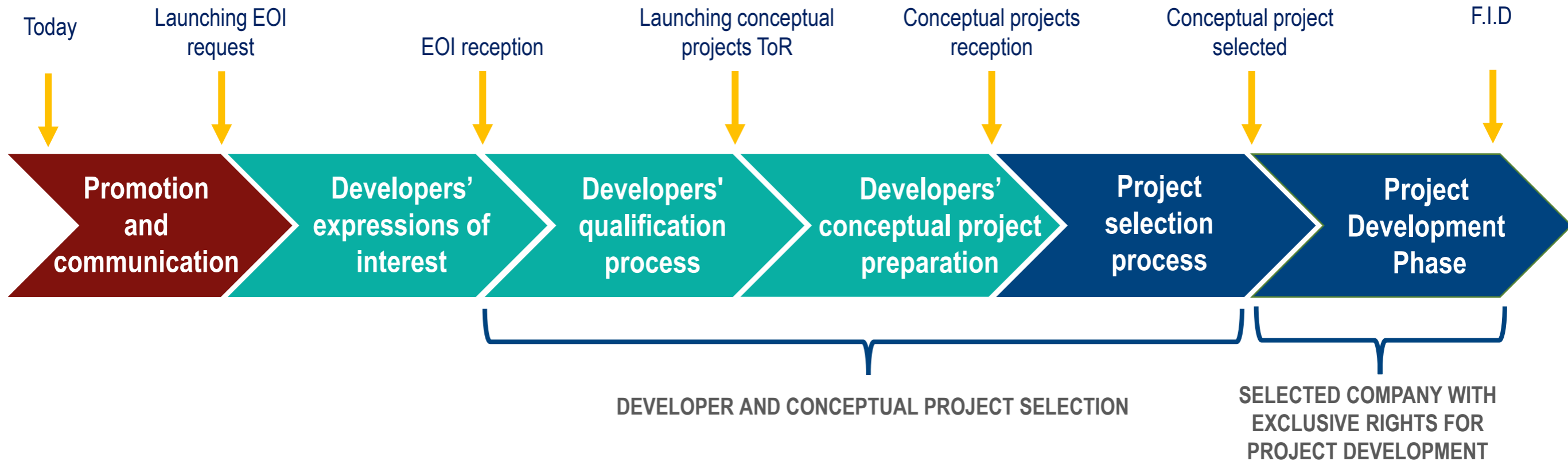
Capurro Industrial Hub

- 13 ha of industrial area next to the Port of Montevideo (of which ALUR Biodiesel Plant 1,5 ha)
- Available area for new industrial processes and storage tanks



La Teja Refinery

The selection process will start mid-December and finish end-March



ANCAP

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ALUR

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