

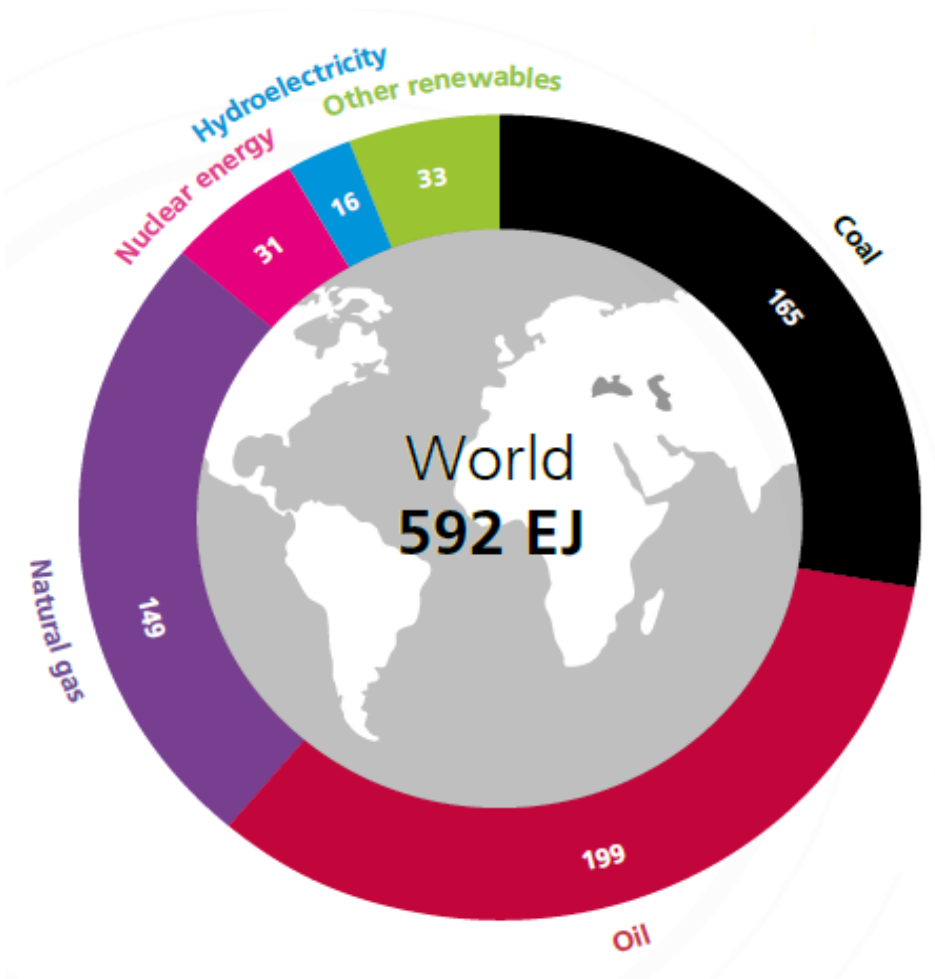
ANCAP's Hydrogen Projects in Uruguay: Upcoming Business Opportunities

Juan Tomasini - ANCAP

Hydrogen Americas Summit & Exhibition
Washington – USA
September 2025



Today's global energy system and the transition



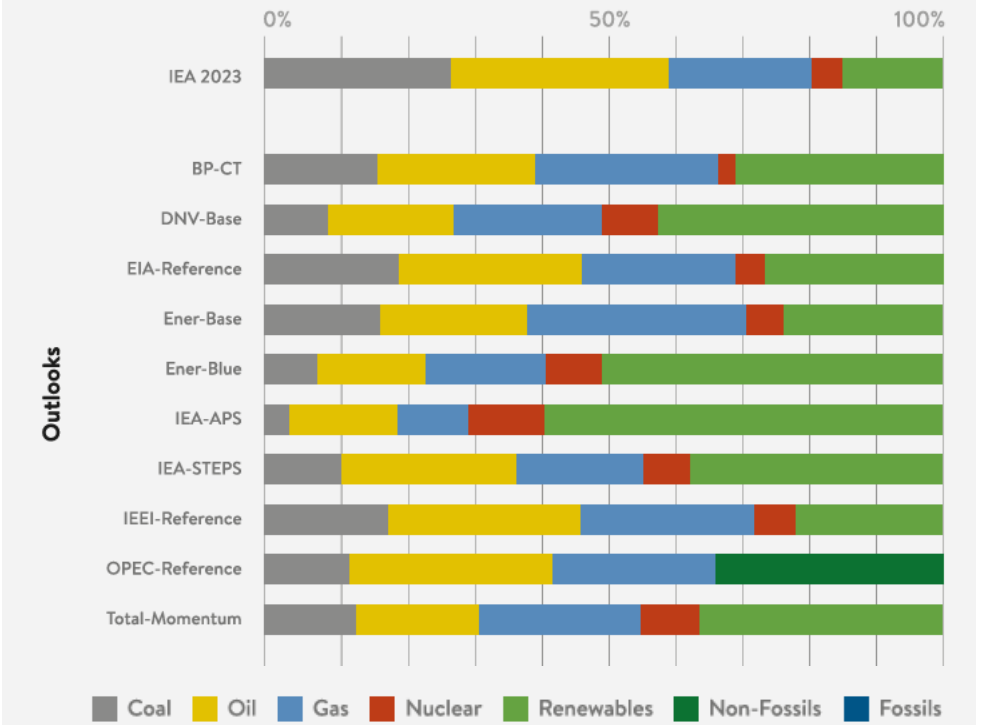
<https://www.energyinst.org/statistical-review/resources-and-data-downloads>



And, not or

<https://www.bp.com/en/global/corporate/what-we-do/our-transformation.html>

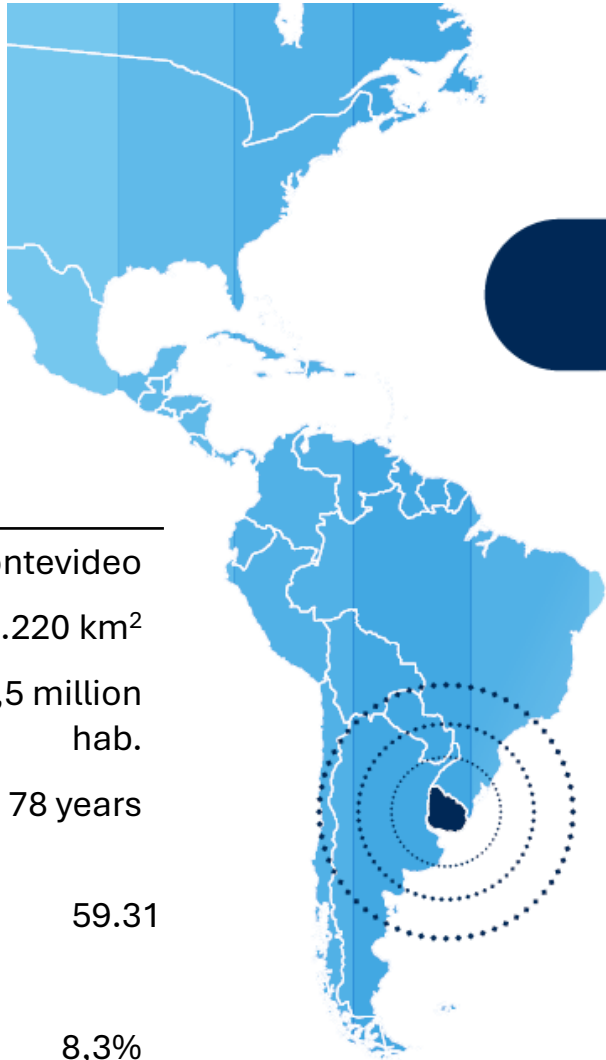
Figure 1 – Primary energy mix by 2050 (in EJ)



WORLD ENERGY COUNCIL | 2025 GLOBAL ENERGY SCENARIOS COMPARISON REVIEW

https://www.worldenergy.org/assets/downloads/2025_Global_Energy_Scenarios_Comparison_Review_-_web.pdf?v=1749025122

URUGUAY



Capital	Montevideo
Land Area	176.220 km ²
Population	3,5 million hab.
Life expectancy	78 years
GDP 2021 (millions of current USD)	59.31
Unemployment rate, 2023	8,3%

UNIQUE COMBINATION OF ATTRIBUTES

Reliability & Certainty

- Stability - Transparency
- Sustainability - ESG
- World class infrastructure

Easy for business

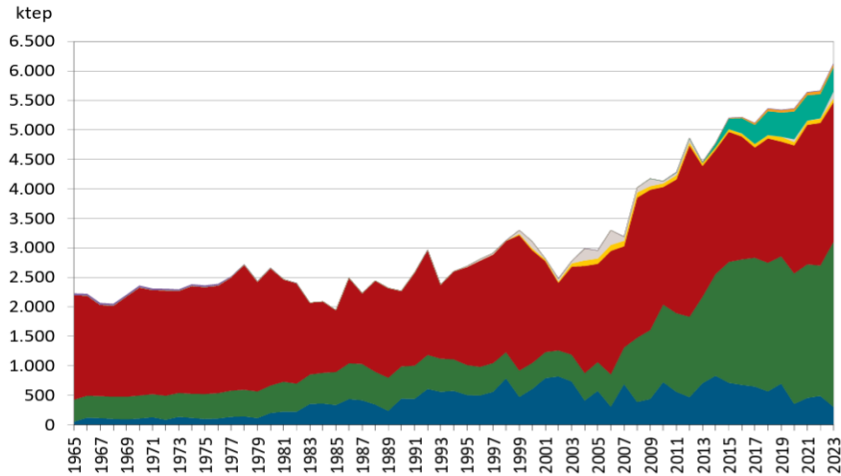
- Markets & Clients access
- Financial freedom & Incentives
- Innovation ecosystem

Talent & Lifestyle

- Multilingual - Flexible - Creative
- Peaceful - Diverse - Safe

Uruguay: First energy transition successfully completed

Primary matrix



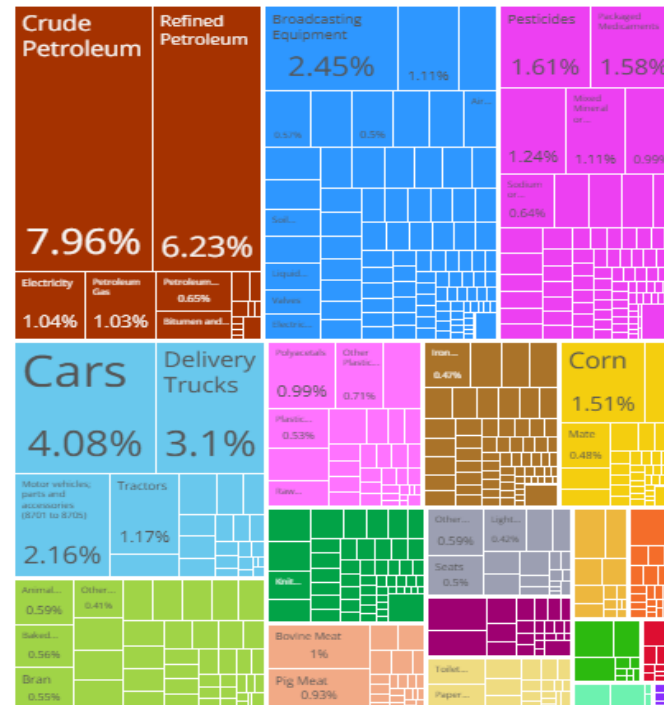
2023	
electricidad origen hidro	5%
biomasa	46%
petróleo y derivados	38%
gas natural	1%
electricidad importada	2%
electricidad origen eólica	7%
solar	1%
otros	0%

39% Fossil Fuels <<
65% LAC << 81%
Global

<https://ben.miem.gub.uy/descargas/1balance/Presentaci%C3%B3n%20BEN2023.pdf>

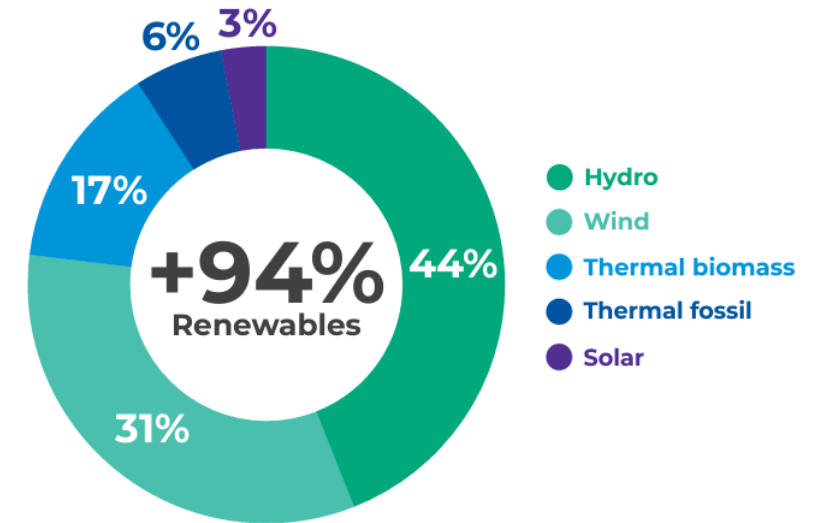
Uruguay Total Imports in 2023

Total: \$13.5B



<https://oec.world/profile/country/ury?yearlyTradeFlowSelector=flow1&yearSelector1=2023#yearly-trade>

Electricity generation matrix Avg 2016 – 2022



94% Renewables >> 64% LAC >>
39% Global

https://www.gub.uy/ministerio-industria-energia-mineria/sites/ministerio-industria-energia-mineria/files/documentos/noticias/H2_final-ingl%C3%A9s2020_0.pdf

URUGUAY: First energy transition successfully completed

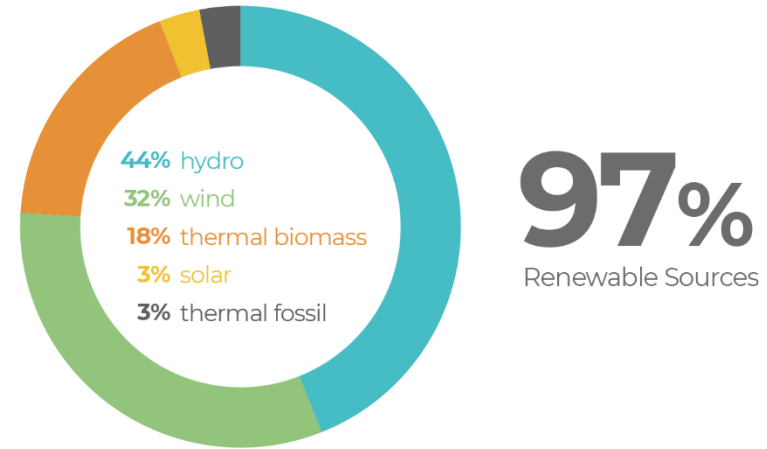


Uruguay's green power revolution: rapid shift to wind shows the world how it's done

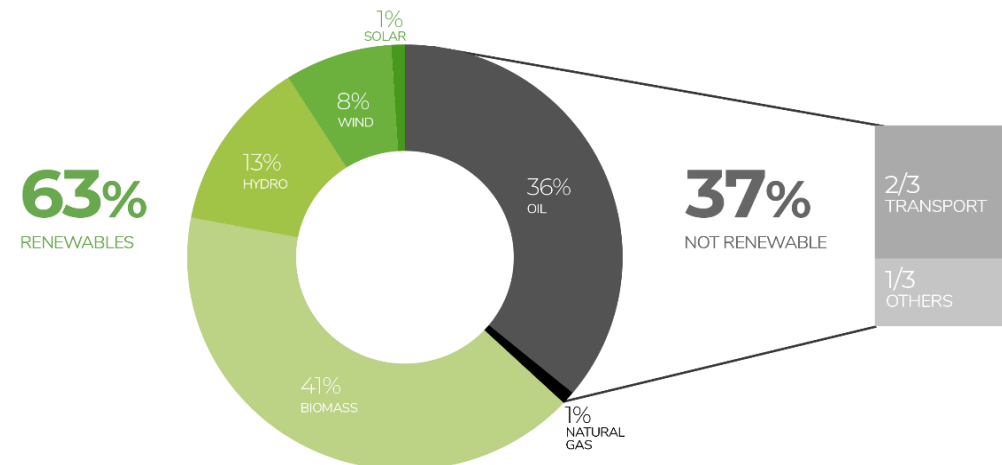
The Guardian

<https://www.theguardian.com/global-development/2023/dec/27/uruguays-green-power-revolution-rapid-shift-to-wind-shows-the-world-how-its-done>

Electricity generation matrix 2017-2020 (MIEM 2021)

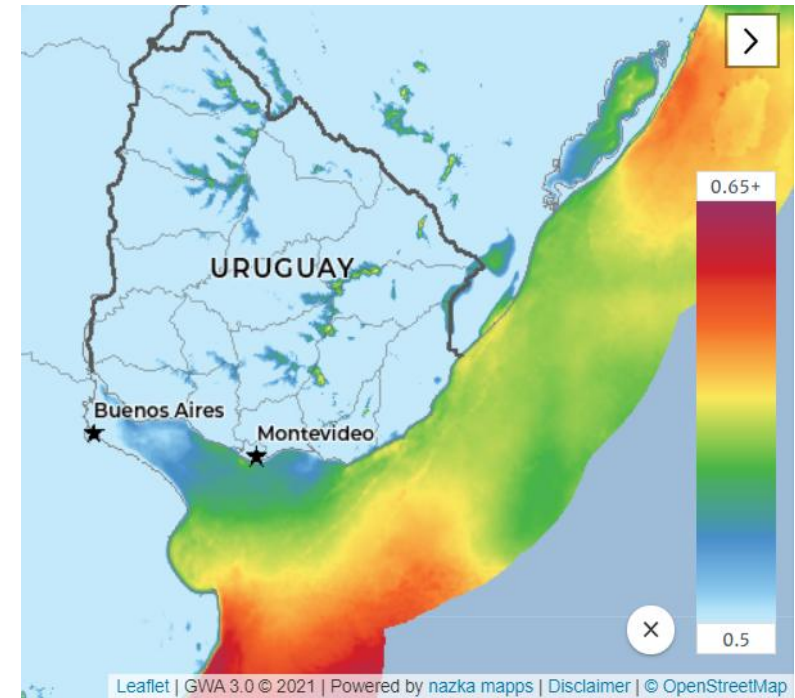


Primary matrix 2019 (MIEM 2021)



Excellent conditions for the next energy transition

- Renewable potential
 - On land: 30 GW of Tier I wind and 60 GW of Tier I solar, with high complementarity
 - Offshore: 275 GW of wind
- Biomass residues of forestry and agricultural origin as a source of biogenic CO₂
- Water resources
- Feedstocks for biorefinery
- Projects to produce e-fuels and biofuels



[Data/information/map obtained from the] "Global Wind Atlas 3.0, a free, web-based application developed, owned and operated by the Technical University of Denmark (DTU). The Global Wind Atlas 3.0 is released in partnership with the World Bank Group, utilizing data provided by Vortex, using funding provided by the Energy Sector Management Assistance Program (ESMAP). For additional information: <https://globalwindatlas.info>"

The offshore of Uruguay has excellent wind conditions considering both mean wind speed (exceeding 8.8 m/s at 100m hub height) and capacity factors (higher than 52% for IEC Class I) (Global Wind Atlas, 2025).

<https://globalwindatlas.info/en/>

ANCAP Group: The largest industrial conglomerate in Uruguay

Production and sale of energetics



18 industrial plants
285 Service Stations



Employees:
3300



2022 results:
Revenue: USD 3.6 billion

- Fuel
50.00 barrels/day
- Biofuel
185.000 m3 year
- Lubricants
16.000 m3 year
- Gas Stations
Network 285
- Natural Gas



<https://www.ancap.com.uy/24/1/refinar-o-importar.html>

ANCAP: enabling the 2nd phase of the Energy Transition

We have key assets to make energy transition projects viable

Production and sale of energetics



18 industrial plants
285 Service Stations

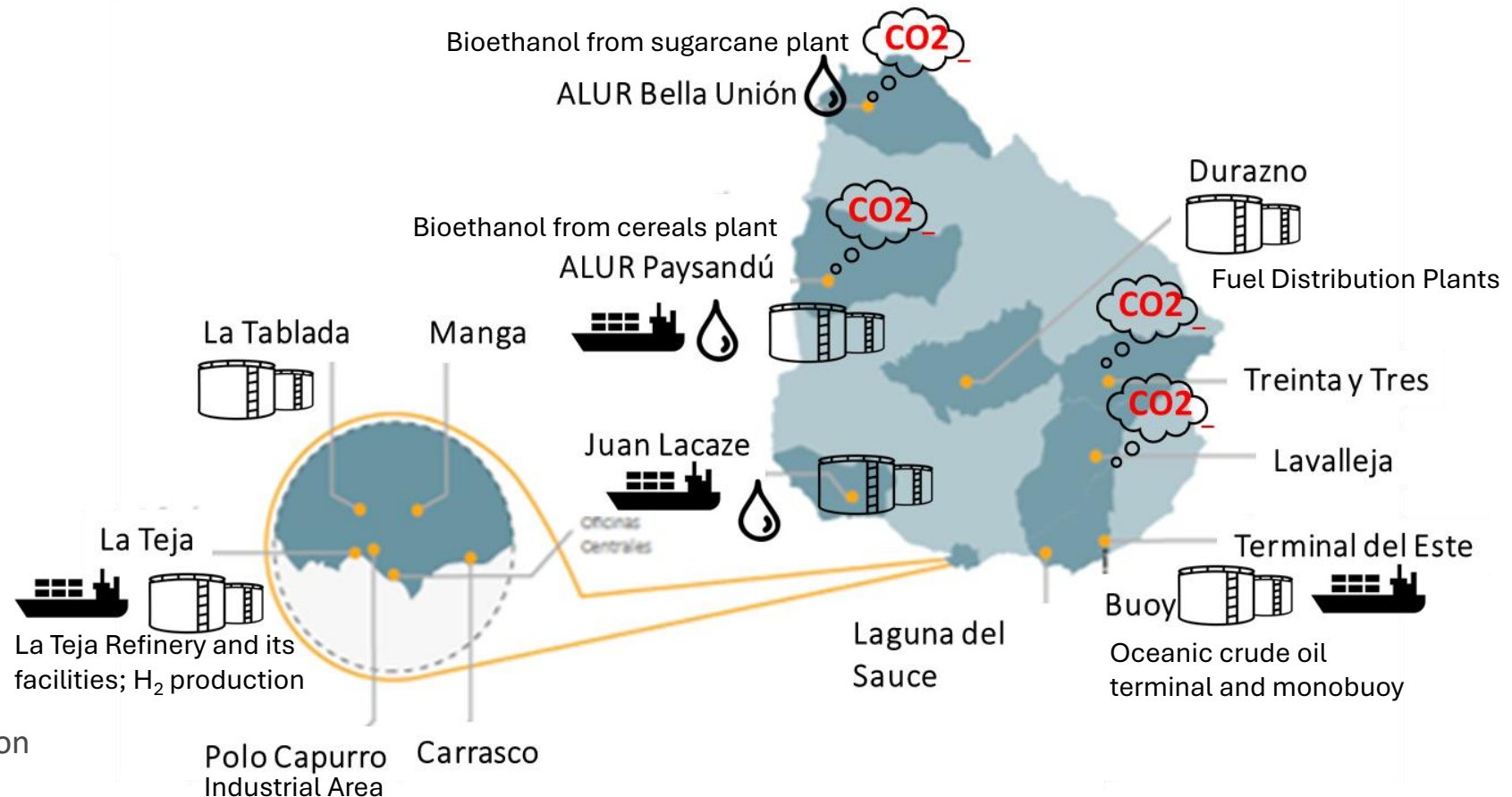


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ANCAP as a Catalyst for H2 Development in Uruguay



Hidrógeno verde: una oportunidad para Uruguay <https://bit.ly/3uYEyDP>

ANCAP: hydrocarbons and sustainable fuels

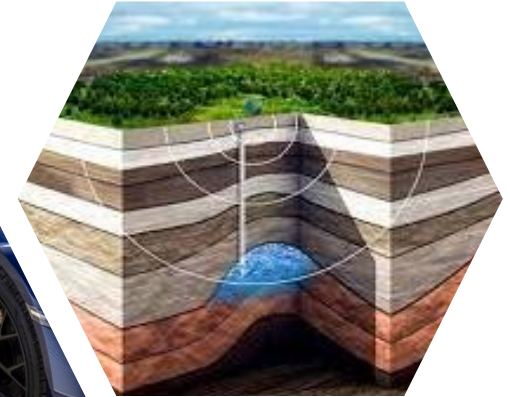
Decarbonization of current operations



HVO / SAF Production



CO2 storage in saline aquifers



E&P of hydrocarbons



ALUR: bioethanol and biodiesel production



E-fuels Production



Green H2 production offshore



Natural / geologic H2 E&P



H2 FC Trucks Pilot

ANCAP: hydrocarbons and sustainable fuels

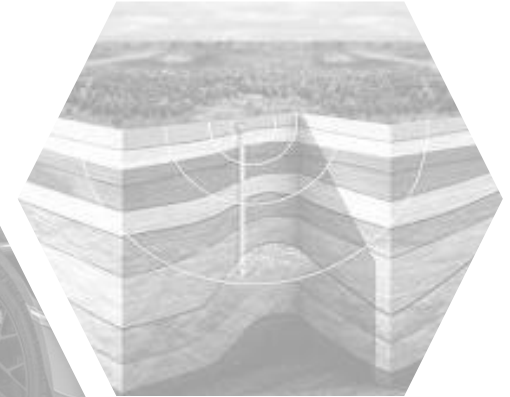
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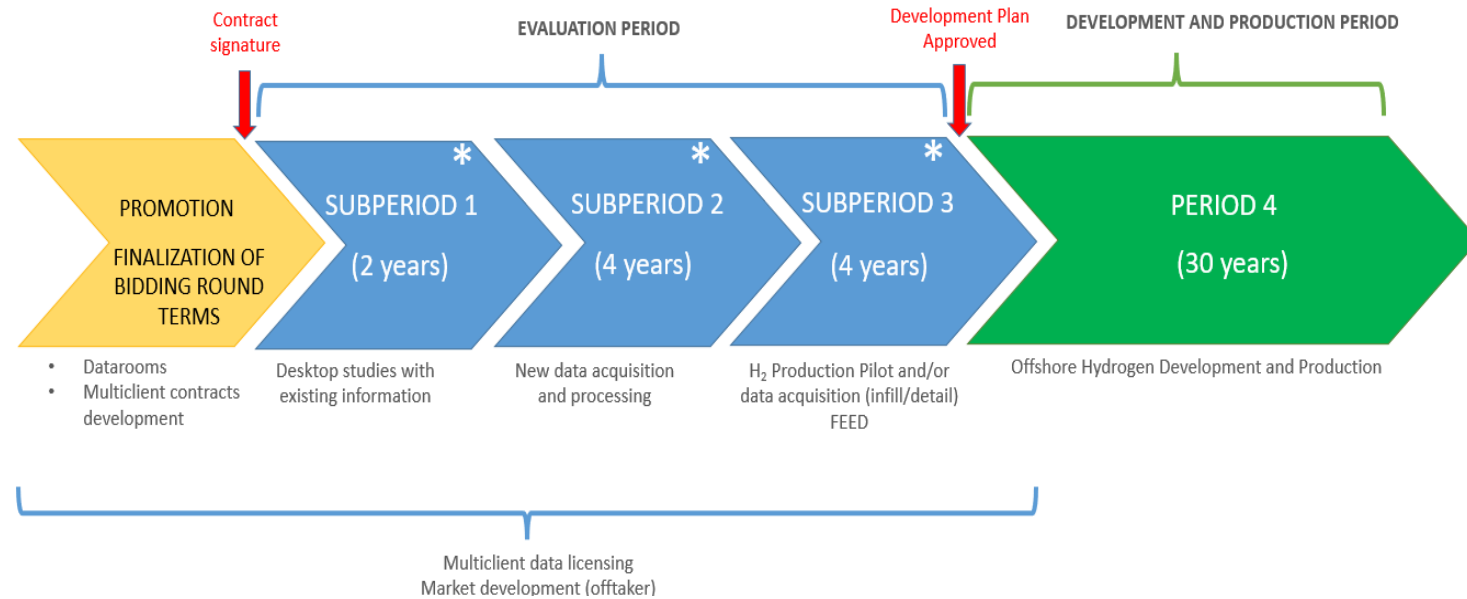
H₂ Offshore



Gemini Advanced (2024). Renewable Hydrogen Production Offshore

ANCAP will be tendering offshore areas for energy companies to carry out feasibility studies and potential installation of infrastructure for the production of H₂ from offshore renewable energy, at their own cost and risk entirely.

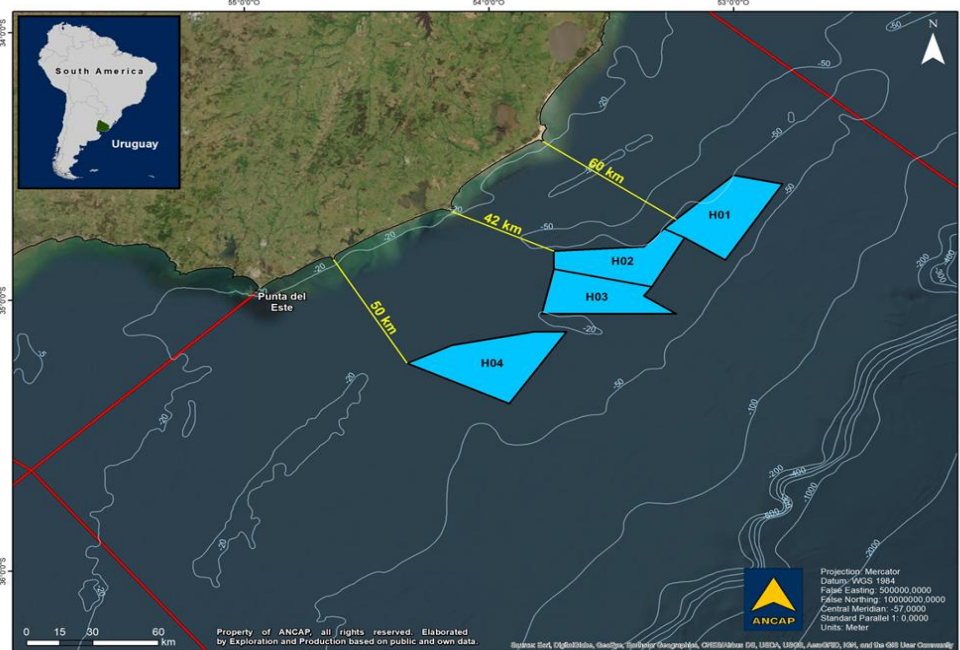
CONTRACT TERMS



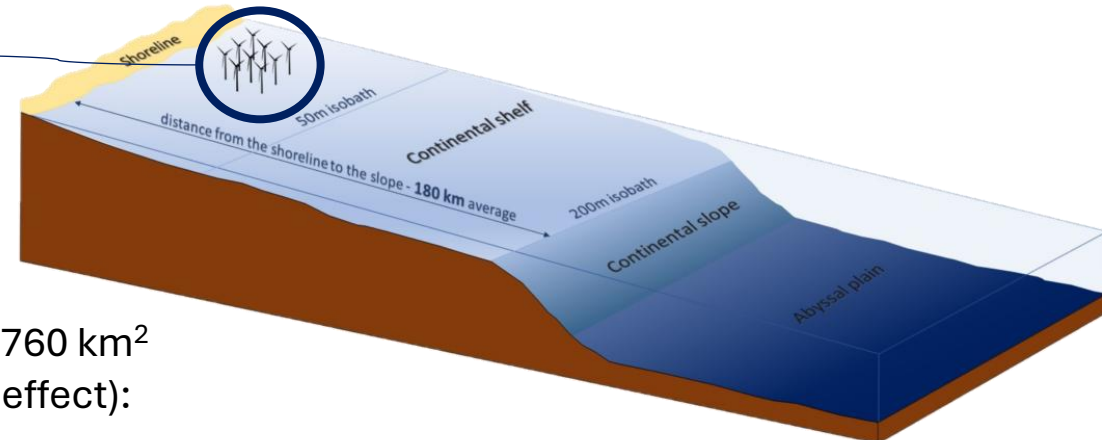
CONTRACT ECONOMY

- Private Investment
- Cost Recovery (CAPEX y OPEX)
- Profit sharing
- ANCAP may associate in case of a committed development

H₂ Offshore



Bottom Fixed Wind Turbines

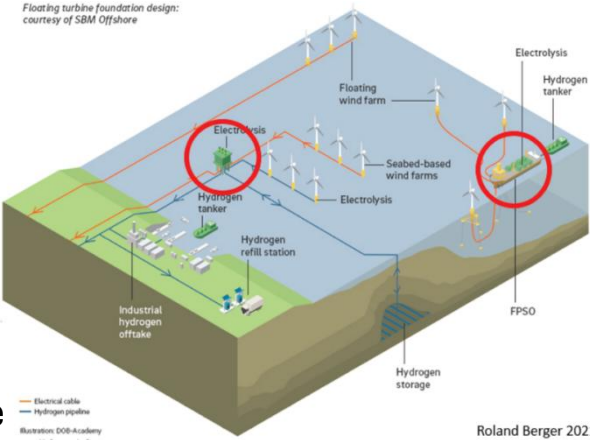


Estimated Potential for 760 km²
(500 km² to avoid wake effect):

- Minimum 3,2 GW
- Production of ≈ 200.000 TonH₂/year
- Minimum interference with other economic activities

Excellent Wind Conditions:

- Large Technical Potential (275 GW)
- High load factors (> 55%)
- Wind speed 9,5 m/s in annual avg (at 100m)
- Slight increase towards south
- Much better quantity, quality, and uniformity than onshore



FLEXIBILITY for the contractor to propose development concept including:

- Offshore / Onshore Electrolysis
- Project scale (phases)
- Type or H₂ Carrier (NH₃, LH₂, etc)
- Market/Off-taker
- Development committed only after 10 years of evaluation period

ANCAP: hydrocarbons and sustainable fuels

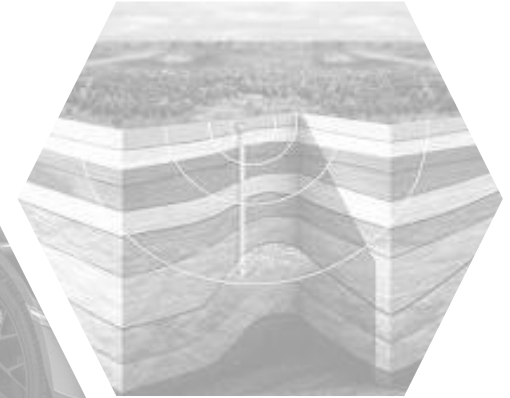
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H2 FC Trucks Pilot



ONSHORE: NATURAL HYDROGEN

• Year 2024

- Understanding H₂ Nat Business
- Training
- Networking
- Research Agreements

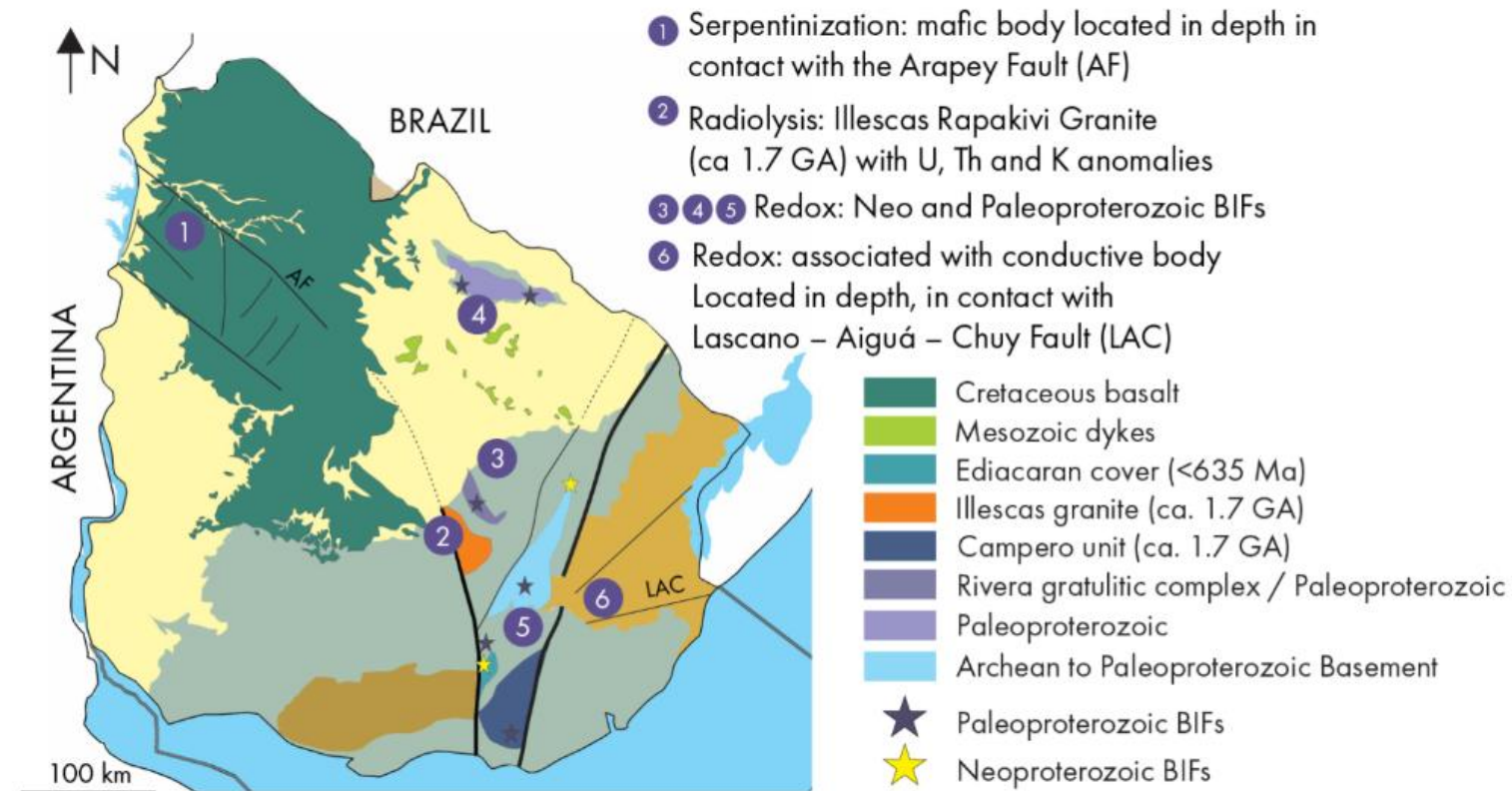


• Year 2025

- Bidding Round Terms and Contract Model – Send for approval of MIEM
- Multiclient Agreements
- Launching H₂ Nat Bidding Round

• Year 2026

- Submission of bids in the H₂ Nat Bidding Round
- Signature of H₂ Nat E&P Contracts



Selected priority sites for natural hydrogen exploration onshore Uruguay. ANCAP. Modified from Sequeira et al., (2024); Oyhançabal et al., (2018); and Oriolo et al., (2018).

<https://geoexpo.com/hydrogen-exploration-potential-in-uruguay/>

ANCAP: hydrocarbons and sustainable fuels

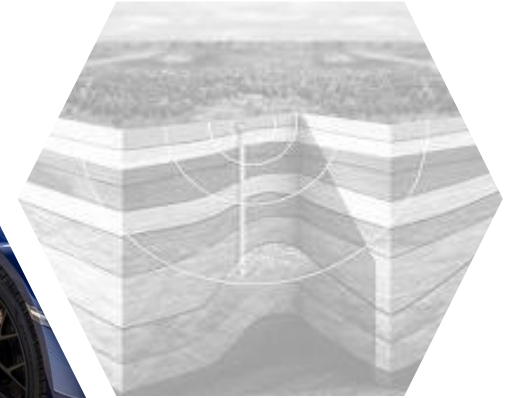
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Natural / geologic H2 E&P



H2 FC Trucks Pilot



Production of e-fuels in Paysandú

HIF Paysandú eFuels Facility




The HIF Paysandú eFuels facility will be our first project in Uruguay. It expects to produce approximately 250,000 tons per year of carbon neutral eGasoline, with the potential to decarbonize over 150,000 vehicles. It will provide over 3,000 jobs during construction and 300 during operations.

Quick Facts

 \$US 4 billion investment

 700,000 tons/year of eMethanol

 900,000 tons of CO2 captured/year

 2025 construction date



<https://hifglobal.com/region/hif-uruguay>

ANCAP: hydrocarbons and sustainable fuels

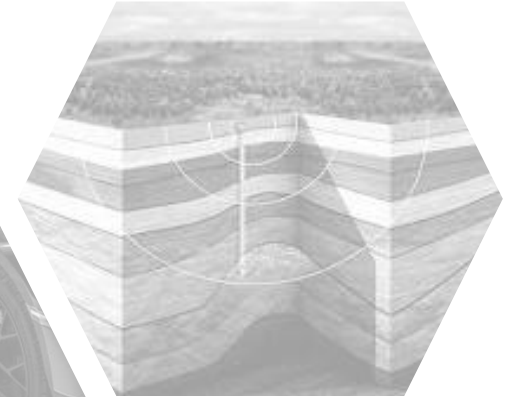
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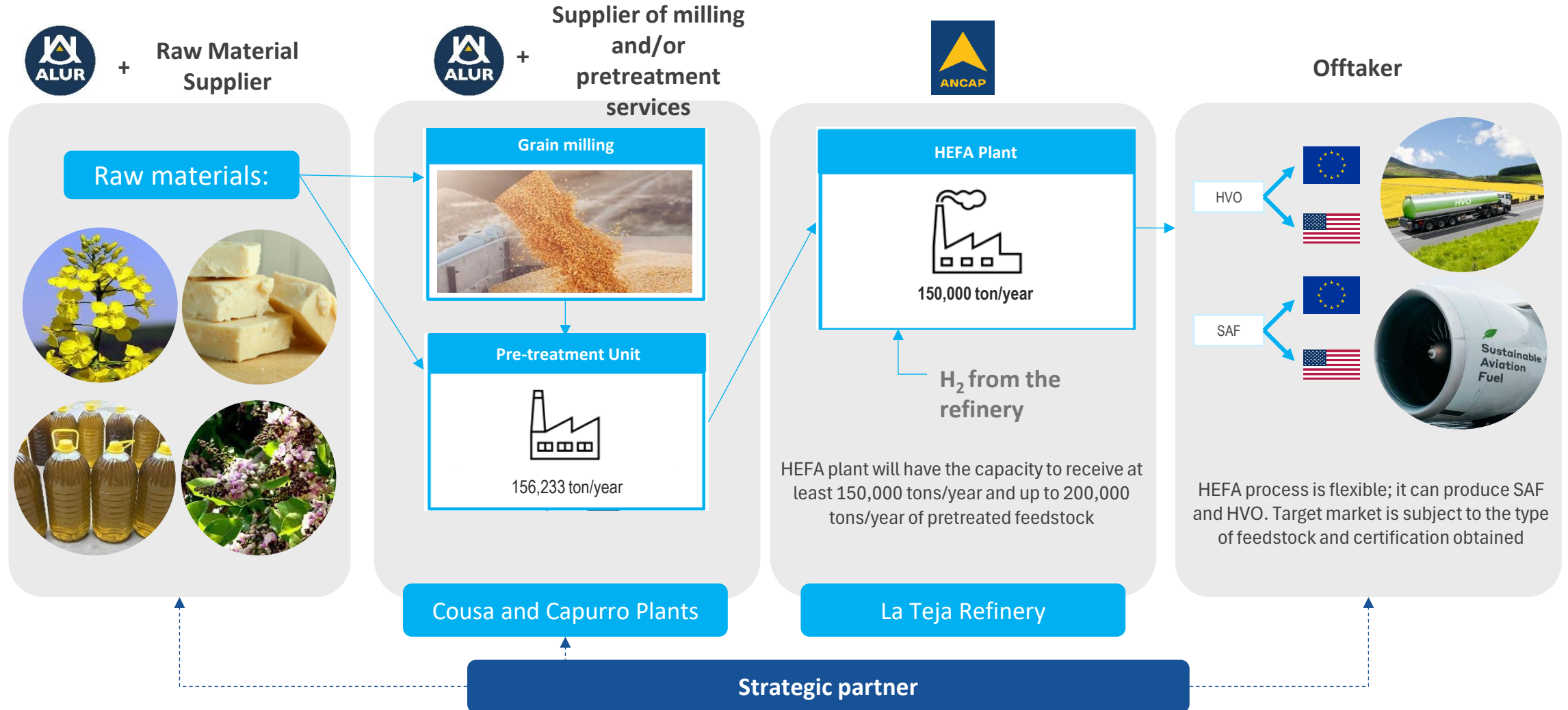


H2 FC Trucks Pilot



PROJECT HEFA: ANCAP & ALUR PLAN TO PRODUCE BIOFUELS (HVO/SAF) THROUGH HEFA ROUTE IN “LA TEJA” REFINERY

Value chain of biofuel production (SAF or HVO) through HEFA route



ANCAP: hydrocarbons and sustainable fuels

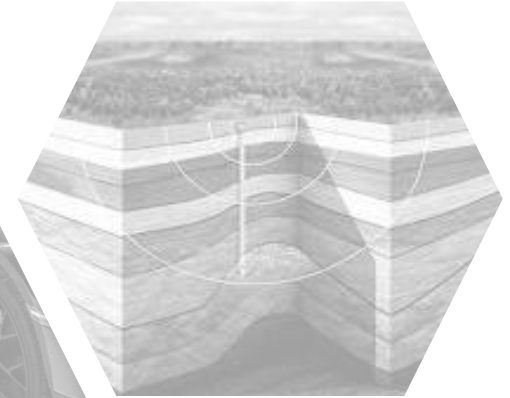
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H2 FC Trucks Pilot



Pilot Project for Hydrogen Fuel Cell Trucks

Hydrogen truck pilot as a strategic step to develop, scale, and consolidate a heavy-duty mobility ecosystem based on green hydrogen.

It will enable the validation of technologies, contractual models, and operational capabilities that support future expansion phases, both in territorial coverage and in the volume of users and sectors.



- Capurro Industrial Hub
- Electrolysis + HRS
- Renewable: Grid
- Aprox. 1MW
- 2-3 HD Trucks
- Operation 2028

Key Takeaways:

- Uruguay is a reliable and stable country (above ground risks minimized)
- Successful first energy transition, strong drive for H2
- ANCAP as a catalyst for H2 development in Uruguay
- Business Opportunities from small-scale / short-term to large-scale / long term projects



<https://www.ancap.com.uy/hidrogeno>

Thank you for your attention!

hidrogeno@ancap.com.uy

The information presented regarding the technical characteristics and timelines of the projects included in this presentation should be considered tentative or in draft form. The official and final versions of the corresponding processes will be released in due course, once they have been formally approved by the authorities.