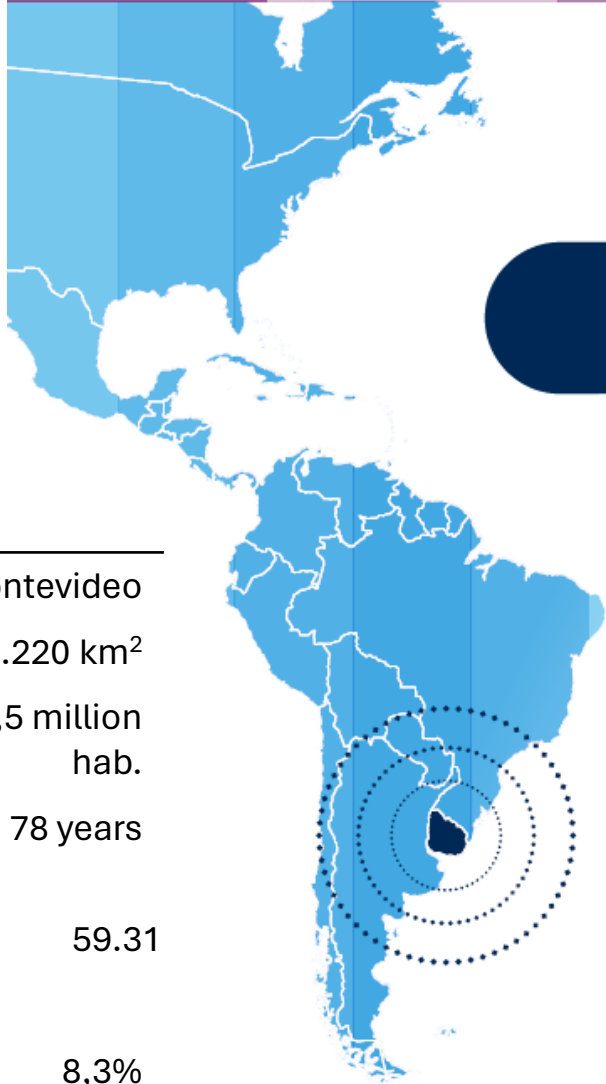




ANCAP's Energy Transition Projects

M. Eng. Santiago Ferro
Energy Transition Manager

URUGUAY



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

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%

URUGUAY: First energy transition successfully completed

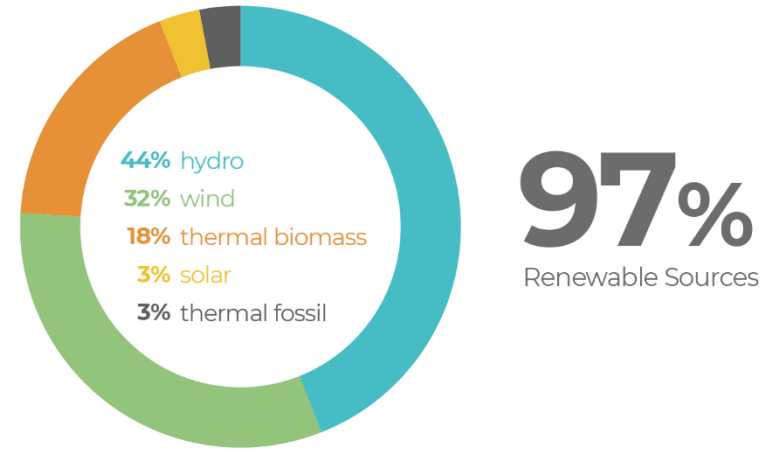


Uruguay's green power revolution: rapid shift to wind shows the world how it's done

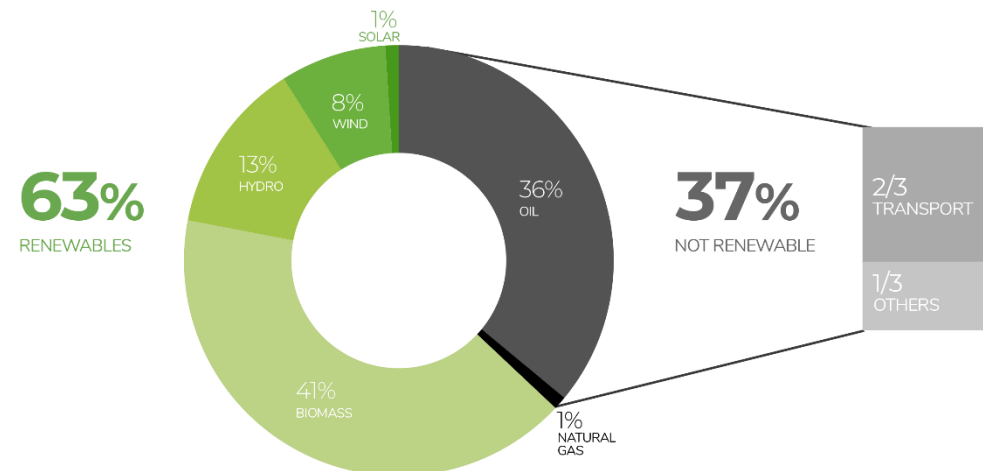
The Guardian

<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)

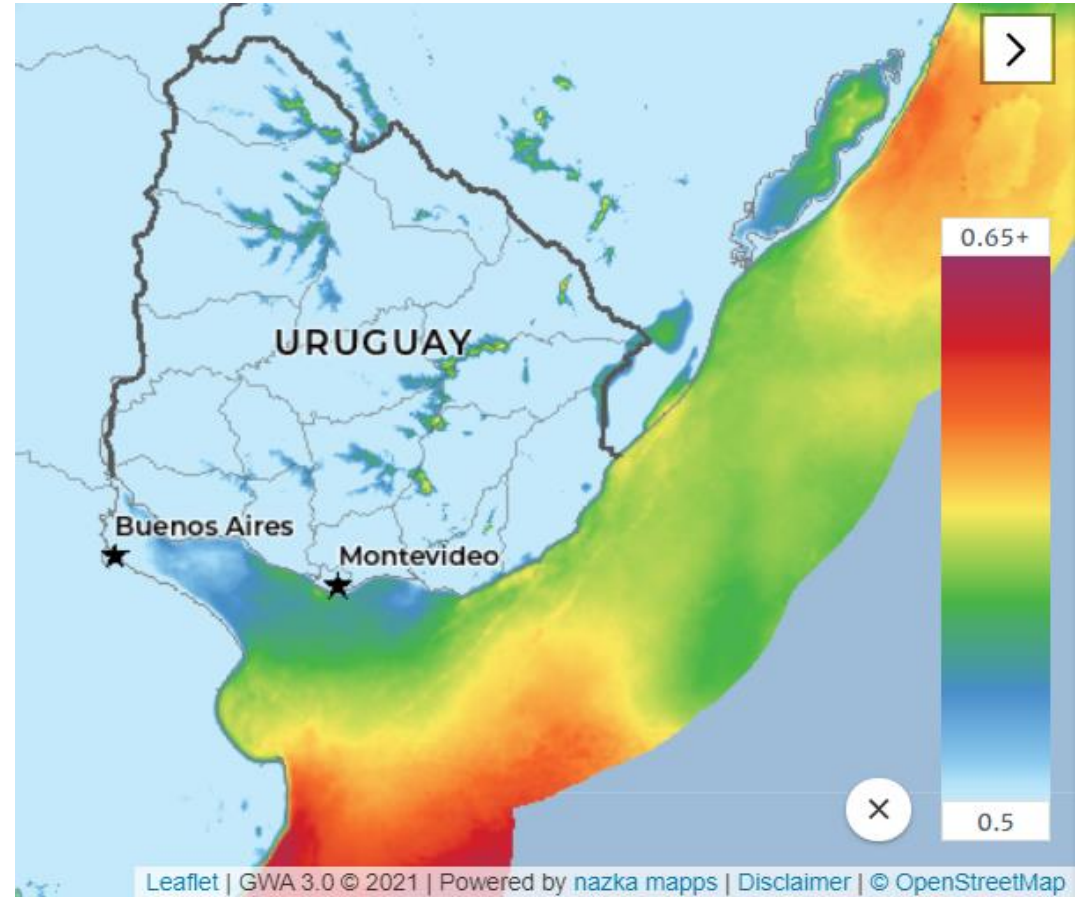


Primary matrix 2019 (MIEM 2021)



Excellent conditions for the second energy transition

- Ample **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
- Competitive levelized cost of hydrogen (**LCOH**)
- Wide availability of biomass residues of forestry and agricultural origin as a source of **biogenic CO₂**
- Wide availability of **water** resources
- Availability of **feedstocks** for biorefinery
- Focus on **green hydrogen and e-fuels** (e-methanol , e-SAF , e-gasoline) and **modern bio-fuels** (SAF or RD) for export and local market



[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>"

<https://globalwindatlas.info/es>

ANCAP: enabling the 2nd phase of the Energy Transition

ANCAP Group: The largest industrial conglomerate in Uruguay
We have key assets to make energy transition projects viable

Production and sale of energetics



18 industrial plants
285 Service Stations

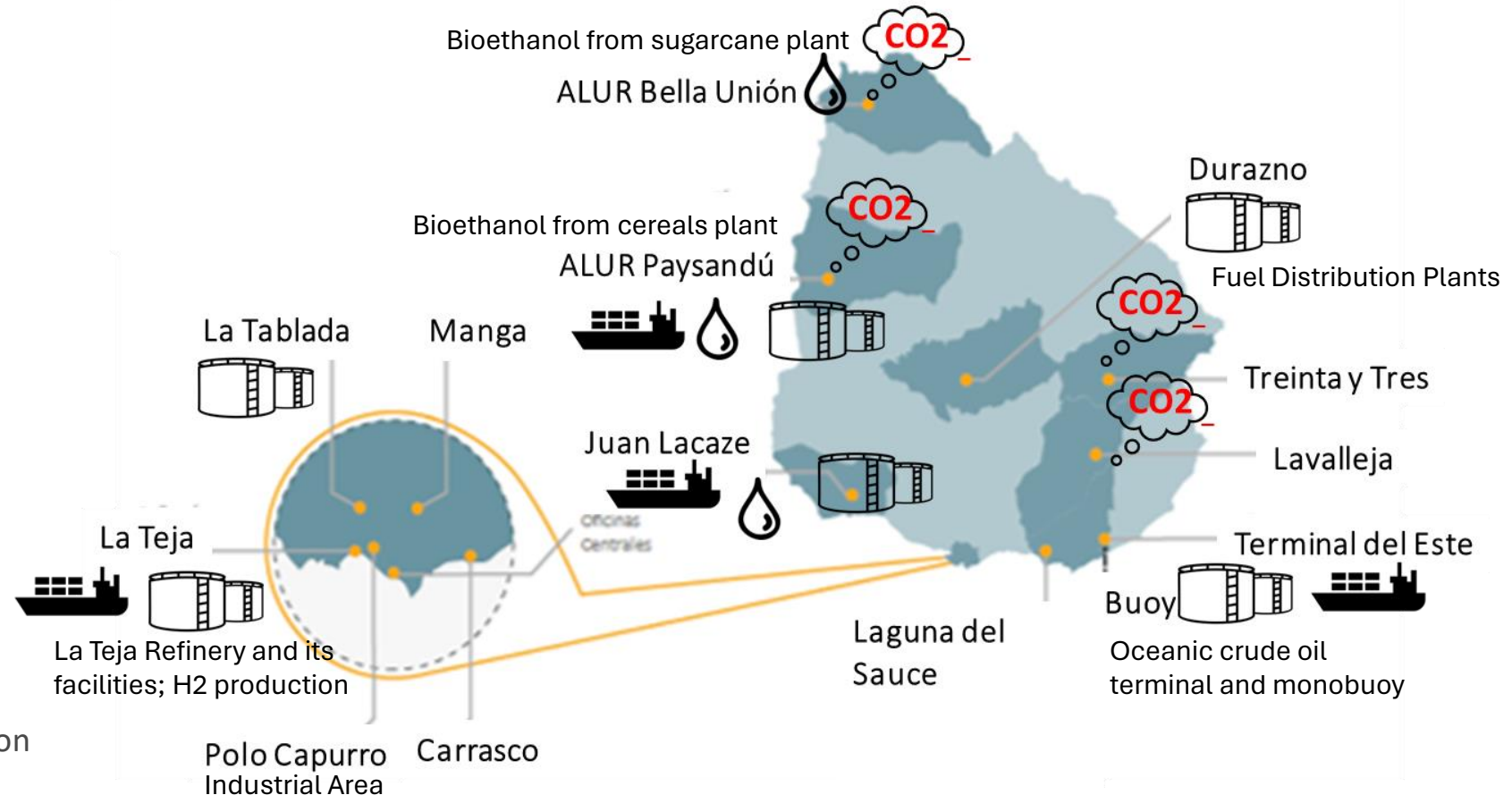


Employees:
3300



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**



Biorefinery: HEFA Unit for the Production of SAF or Green Diesel

Rapeseed Oil (potential)

90.000 tons



Soybean Oil (potential)

500.000 tons



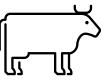
Animal Fat EXP 2022

90.000 tons



UCO EXP 2022

2.000 tons



UCO potential

5.000 – 10.000 tons



Current Capacity:

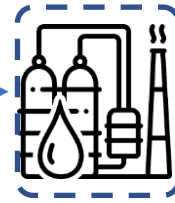
110.000 tons of oil

- 80 % ALUR

15.000 tons of animal fat



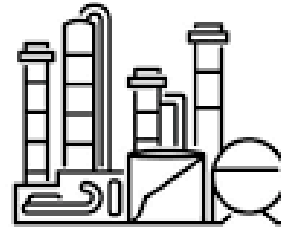
Partner | Commercial Risk
Selection during 2024



150.000 ton

H₂
Utilities
Storage
Handling

Effluents
Byproducts



ANCAP

Scale and Potential Impact

2.000 to 5.000 tons of biogenic CO₂

10.000 ton **bio** Propane

- 8 % demand of UY

5.000 to 20.000 tons **bio** Gasoline

- 1 to 3 % demand of UY

- 5 to 15 % more H₂ available (**green**)

Up to 120.000 tons **SAF**

- 150 % demand of UY

Up to 130.000 tons **RD**

- 15 % demand of UY

- Up to 7 % conditional to 2030, according to 2^{da} NDC

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



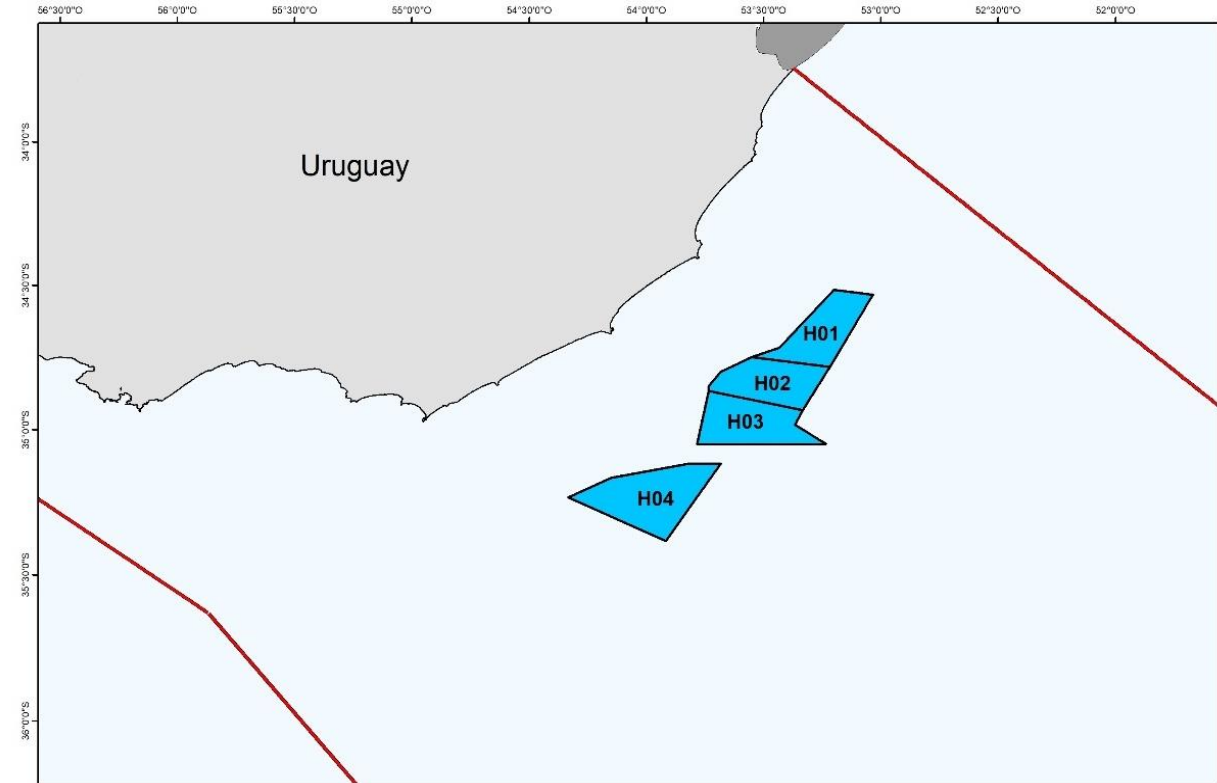
<https://hifglobal.com/region/hif-uruguay>

H₂U Offshore



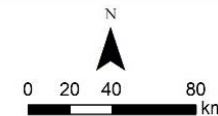
Source: <https://tractebel-engie.com/en/news/2019/400-mw-offshore-hydrogen-production-takes-system-to-new-levels>

ANCAP is planning to tender 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.



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

- Minimum 3,2 GW
- Production of ≈ 200.000 TonH₂/year



Sistema de Coordenadas:
Proyección: Mercator
Datum: WGS84
Falso Este: 500.000
Falso Norte: 10.000.000
Meridiano Central: 57° 0' 0" W
Paralelo Estándar: 0° 0' 0" S
Unidades: metros

Reliable supply for the Uruguayan market, at the required quality and quantity, in an affordable and sustainable way

ANCAP



Hydrocarbons Exploration & Production

First time in Uruguayan history that all the offshore blocks are awarded with E&P contracts.



Decarbonization of current operations

We are committed to the reduction of the carbon emissions from our traditional operations and in all our industrial plants.



Take responsibility for the energy transition in Uruguay, leading the development of sustainable molecules that will be increasingly consumed in the coming decades

BioRefinery

ANCAP and ALUR are working to develop HVOs (Hydrotreated Vegetable Oils), which are fuels from vegetable oils, animal fats and used cooking oils (UCOs).

The raw materials will be processed at ALUR's facilities and the HVO produced at ANCAP's La Teja Refinery, through catalytic hydrogenation.



e-fuels

Biogenic CO₂ of ALUR's bioethanol plant in Paysandú will be used for the first e-fuels production project in Uruguay.



H₂ URUGUAY Offshore

H₂ Offshore

ANCAP is planning to tender 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.



ANCAP

Thank you for your attention