LATIN AMERICA & CARIBBEAN ENERGY SUMMIT
19–21 NOVEMBER 2024 • PUNTA DEL ESTE, URUGUAY

Co-hosted by ANCAP

ANCAP´s Refinery towards the energy transition

Panel - New Frontiers for Sustainable Fuels

Cecilia Romeu, MSc. Eng.

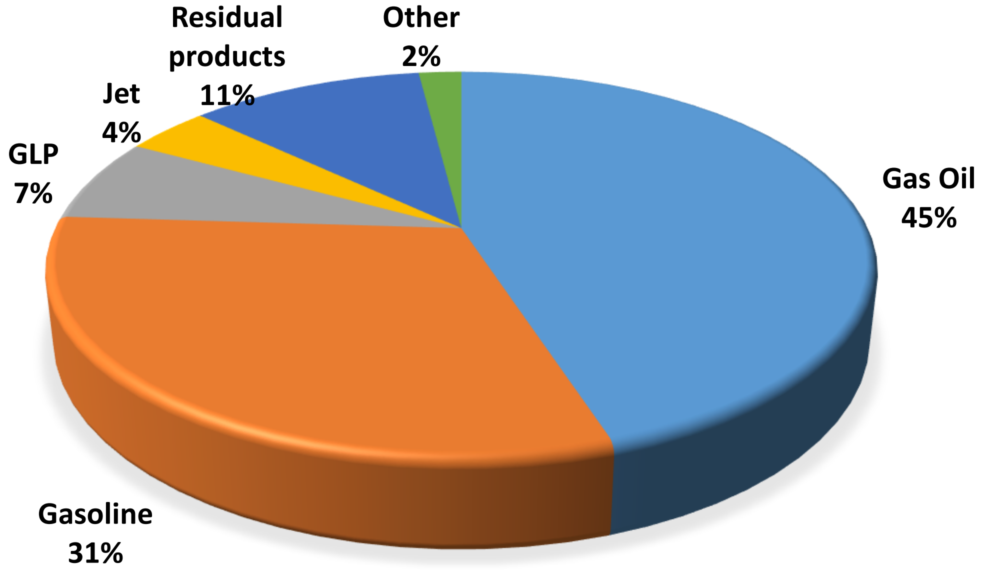
Energy Transition

ANCAP

November 21st, 2024 - Punta del Este, Uruguay

La Teja Refinery

- **Capacity: 50,000 bbl/day**
- **Main products:**



- **Sustainability Initiatives**
  - Reducing emissions across all operations
  - Transitioning to a **bio**refinery focused on producing sustainable fuels (**SAF**, **HVO**) from sustainable feedstocks

ANCAP: Boosting the 2nd Energy Transition

ANCAP Group: the largest industrial conglomerate in Uruguay
Key assets to make energy transition projects viable

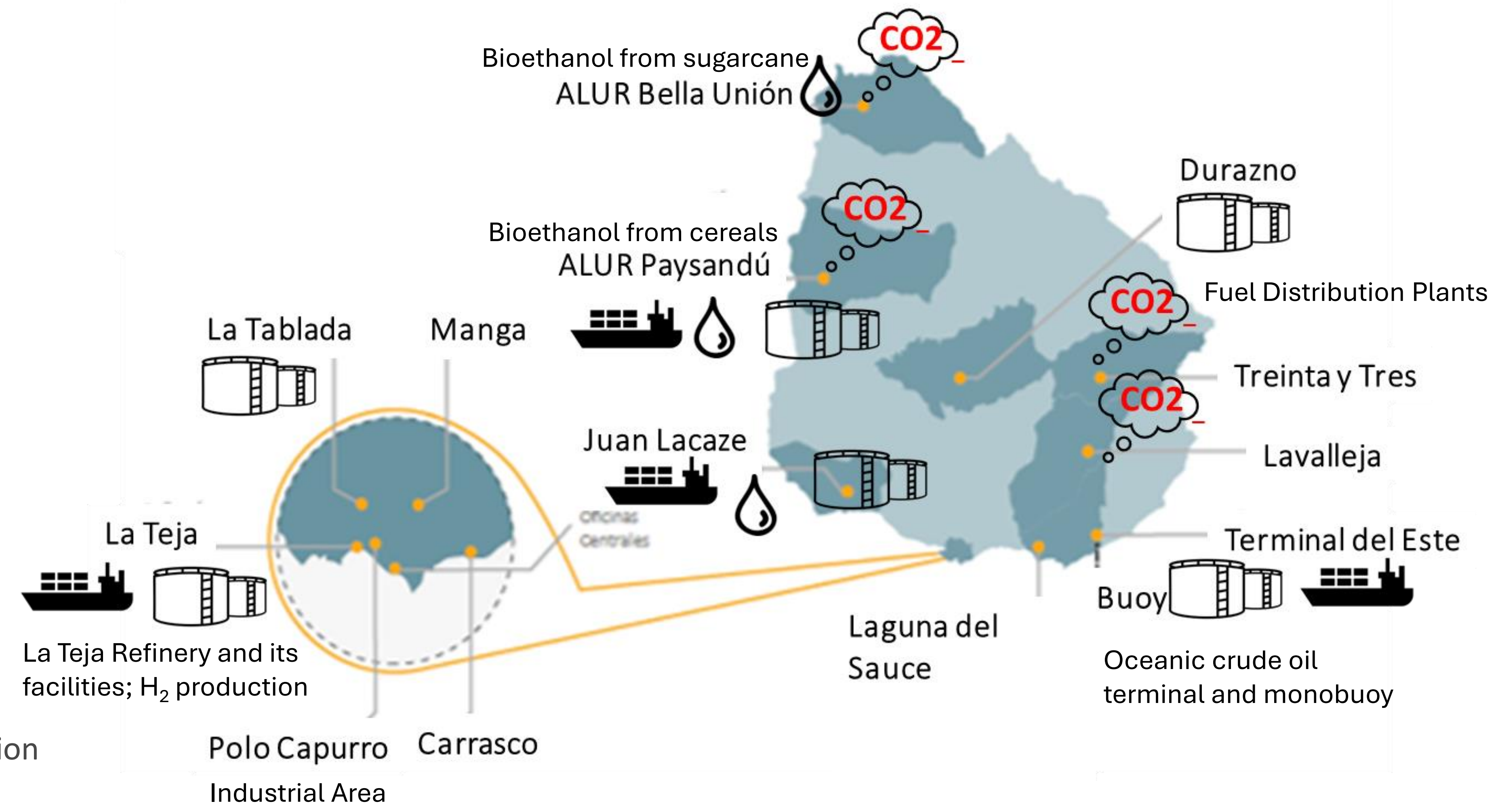
Production and sale of energetics

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

18 industrial plants
285 gas stations

Employees:
3300

2022 results:
Revenue: USD 3.6 billion



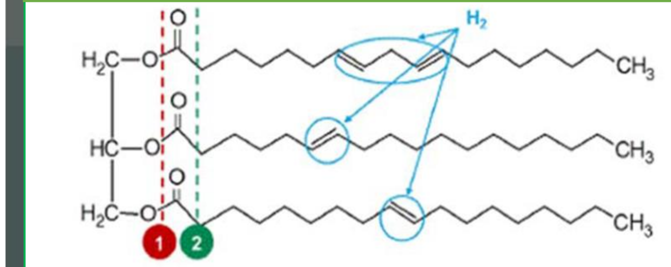
1st stage of sustainable molecules production

Biodiesel
60,000 m^3/year

Bioethanol
100,000 m^3/year

Biorefinery processes

HEFA ROUTE



1 **Hydrogenolysis** / **Hydrogenation**

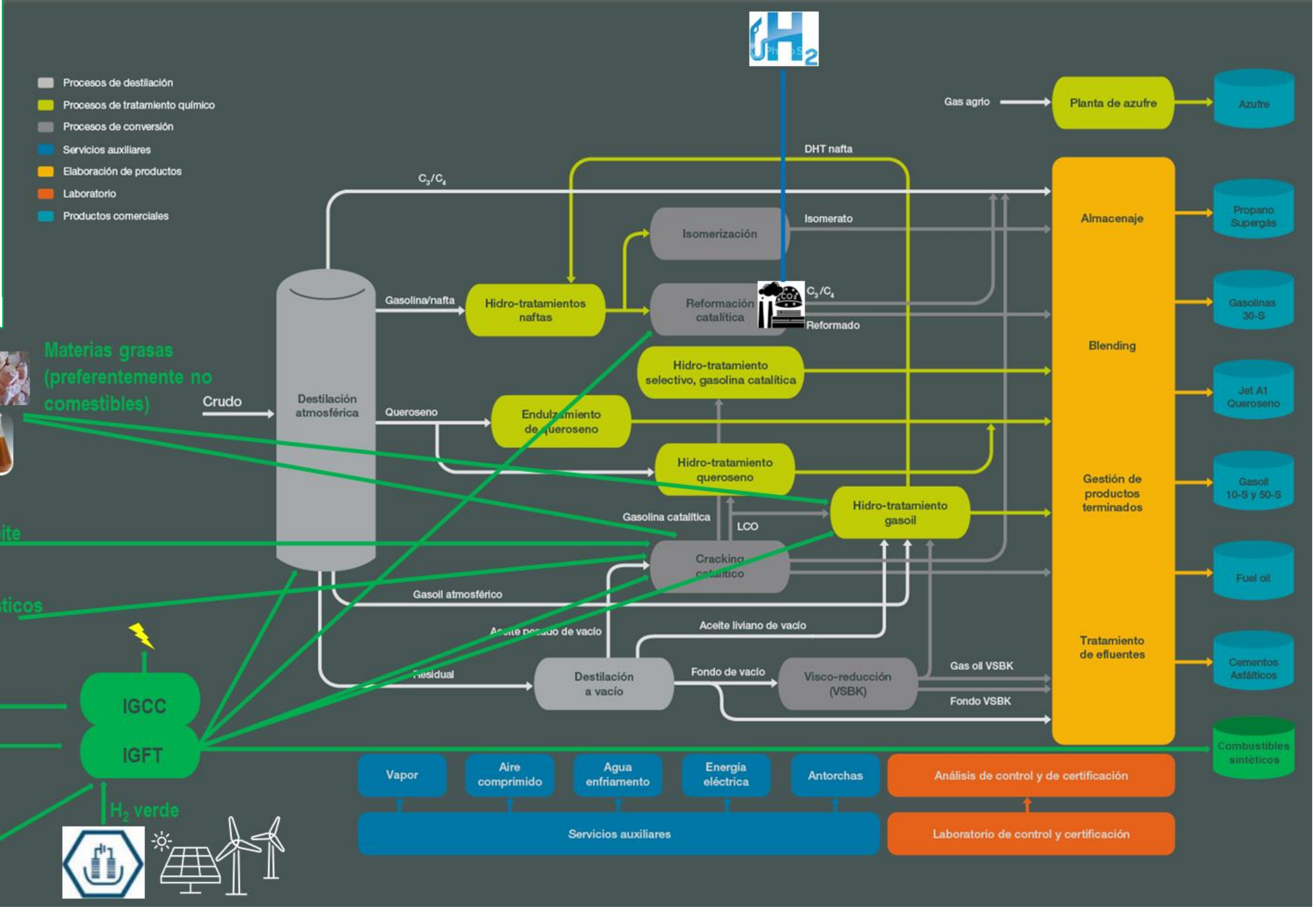
$TG + 16^* H_2 \rightarrow 3\ C_{18}H_{38} + 6\ H_2O + C_3H_8$

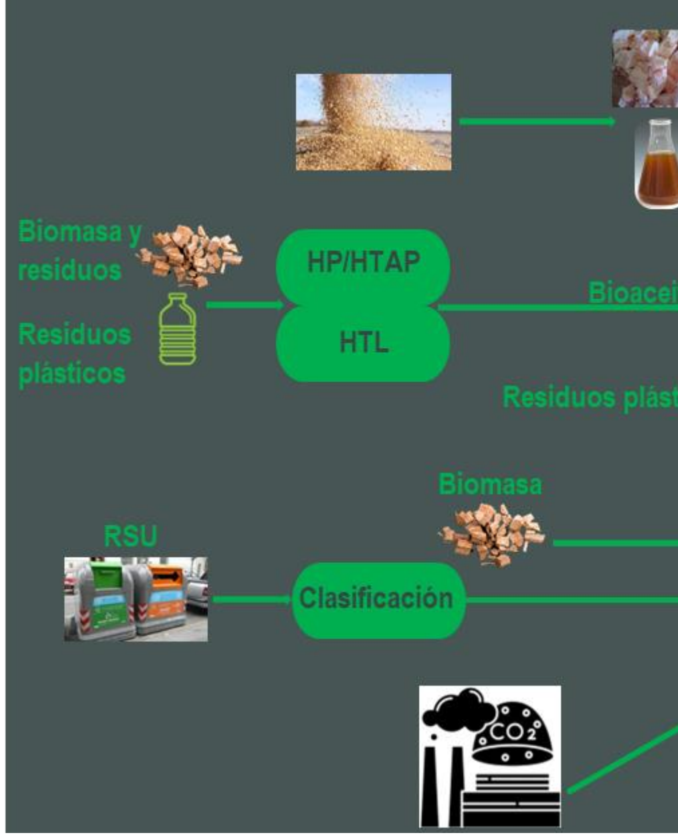
2 **Decarboxylation** / **Hydrogenation**

$TG + 7^* H_2 \rightarrow 3\ C_{17}H_{36} + C_3H_8 + 3\ CO_2$

3 **Shift + Methanation reactions**

CO & CH_4 by-products

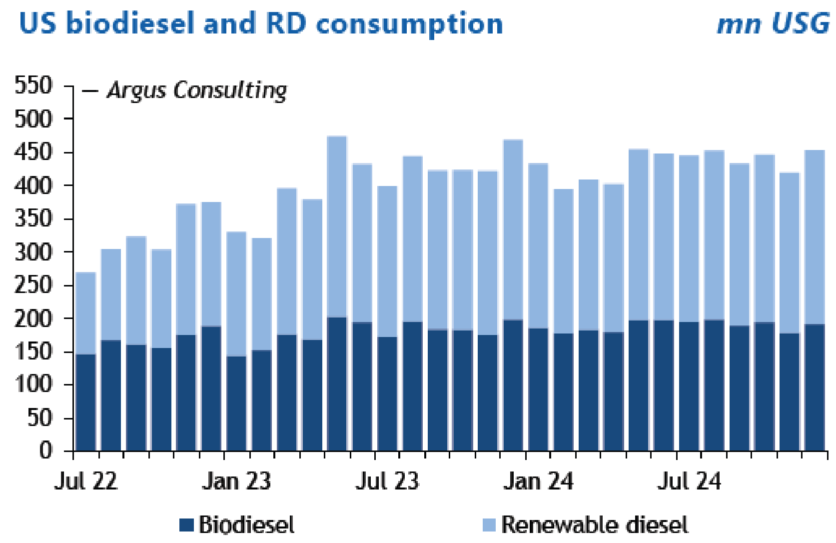


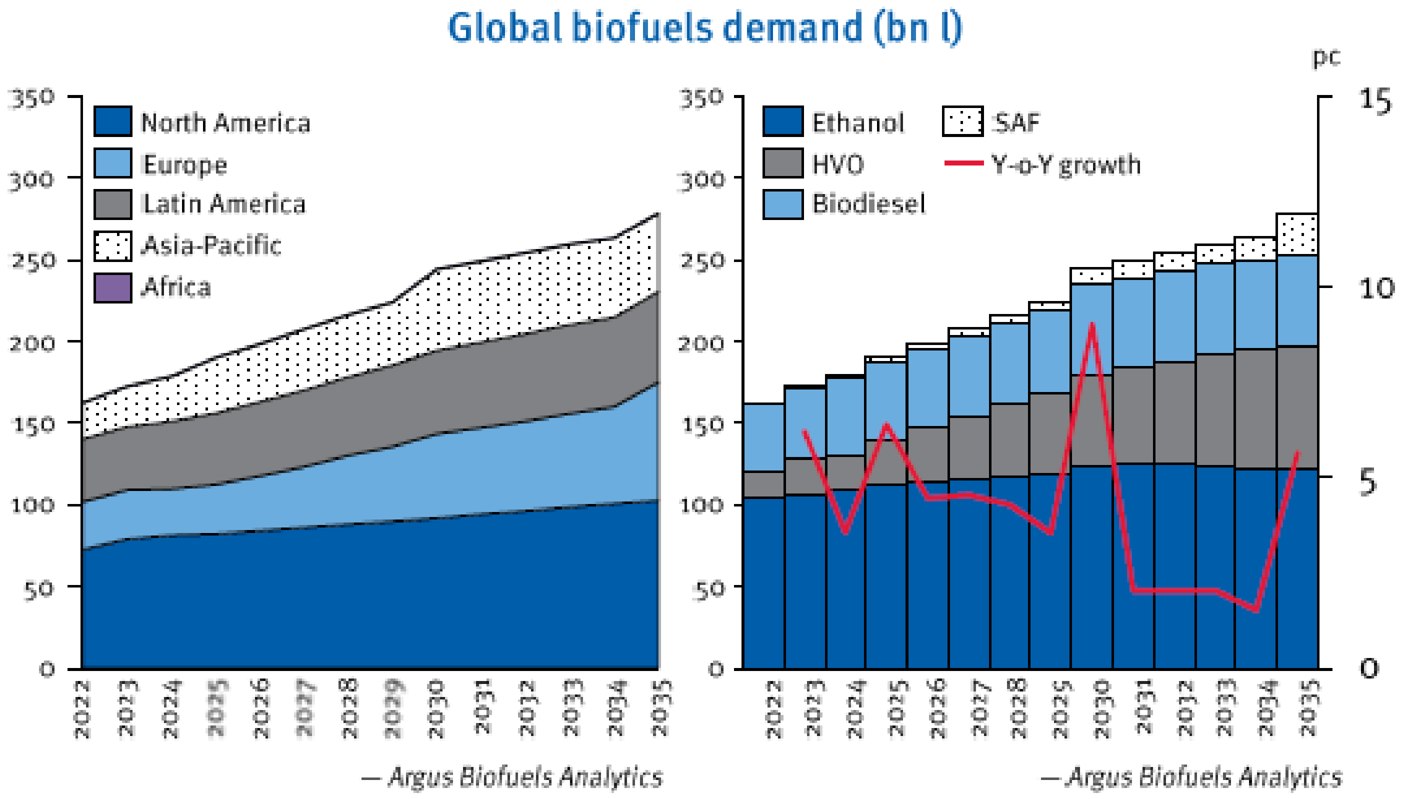


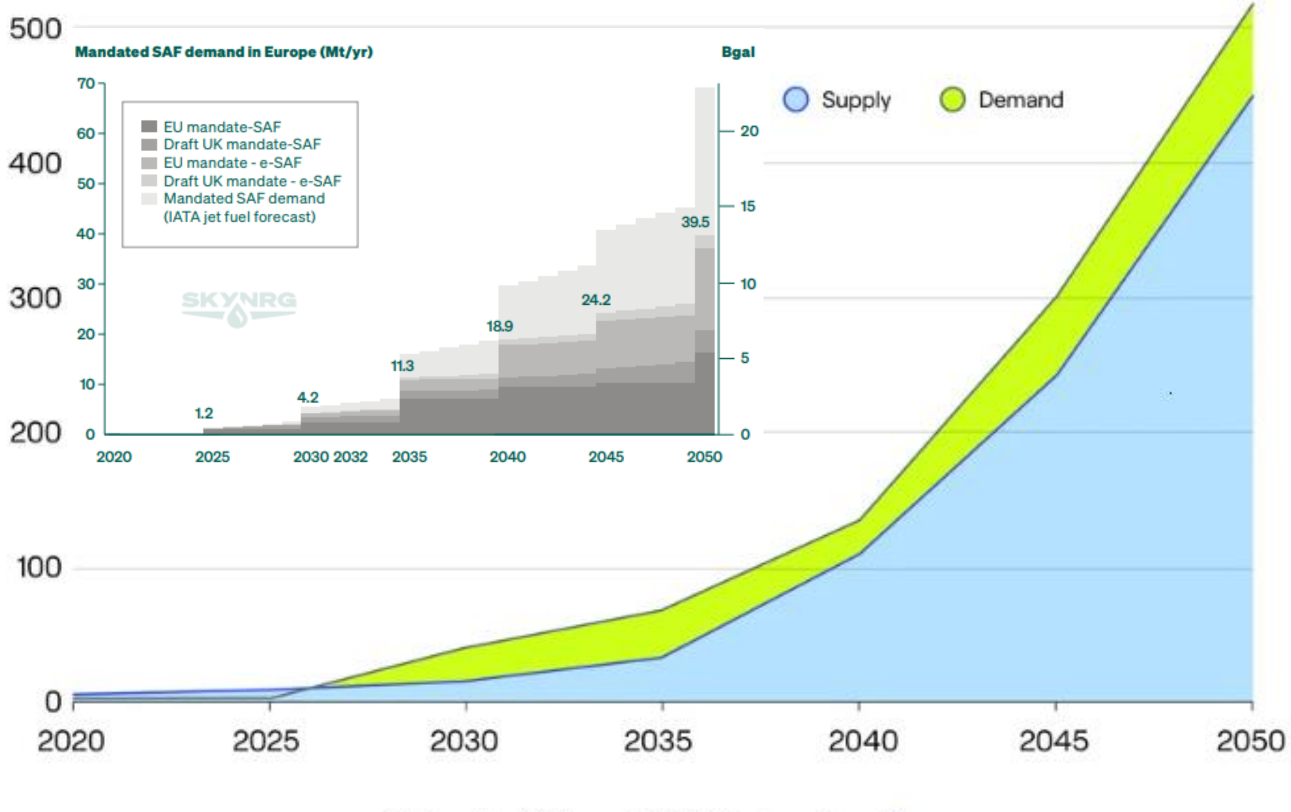
ANCAP

Opportunity

- Global biofuels market is experiencing significant shifts
- Established market for HVO, primarily in the USA and EU
- Emerging market for SAF, driven by regulations







Global predicted SAF demand, 2022-2050 (millions of tonnes)[28]

ANCAP & ALUR are launching a Call for Expression of Interest aimed at developing a biofuels production project through HEFA route

Biofuel production value chain (SAF or HVO) through HEFA route

ALUR + Low-carbon intensity feedstock supplier

Feedstock

ALUR + Crushing and/or pretreatment services supplier

Crushing

Pretreatment Unit

Crushing and Pretreatment Plant

ANCAP

HEFA Plant

150,000 ton/year

H_2 from the refinery

HEFA plant will have the capacity to receive at least 150,000 tons/year and up to 200,000 tons/year of pretreated feedstock

La Teja Refinery

Trader

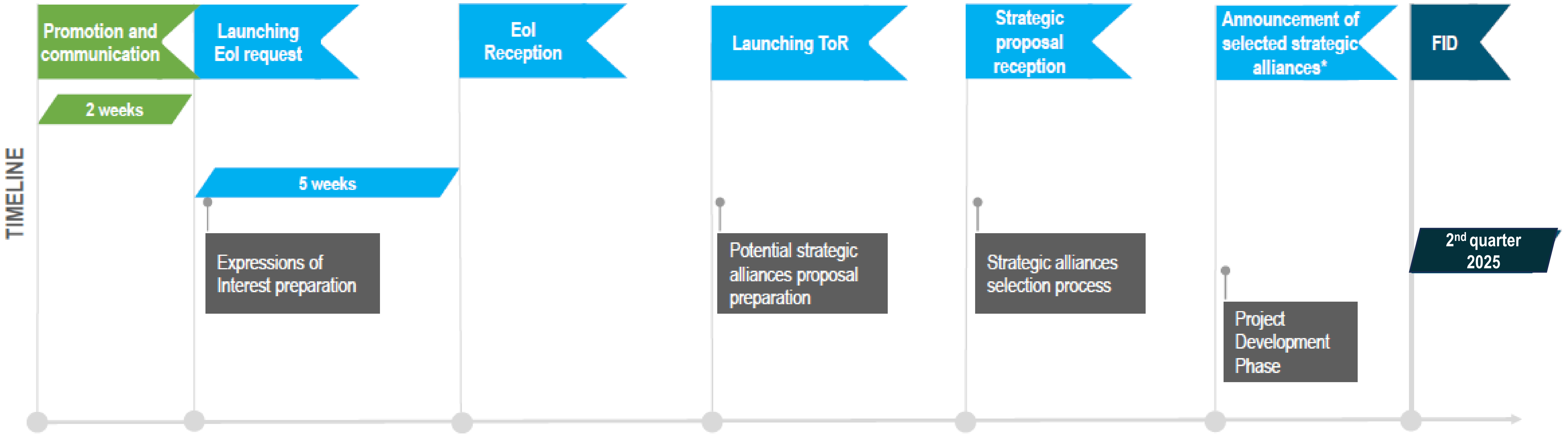
HVO

SAF

HEFA process is flexible; it can produce SAF and HVO. Target market is subject to the type of feedstock and certification obtained

Strategic partner

Stages of the call for proposals



Two-stage selection process:

- **Call for Expressions of Interest (EoI):** input for Terms of Reference (ToR) development
- **Call for Strategic Proposals:** Selection process based on the ToR

HEFA Project status

Feasibility study

- Market study
- Legal analysis of markets
- Financial and socioeconomic analysis

Done

Engineering study and technologist selection for HEFA production plant

Engineering study and technologist selection for pretreatment plant

Strategic alliances selection

Work-in-progress

Thank you for your attention!

ALUR	Contact:	ANCAP
www.alur.com.uy	HEFA@alur.com.uy	www.ancap.com.uy