Alvean

A global leader in the sugar sector since its creation in 2014, Alvean operates in the origination, marketing and trading of raw and white sugar. Responsible for about a third of the physical movement of sugar in the world, the company originates the raw material in Brazil and in other producing countries in Asia, Central America, and Oceania. Markets served include countries in Africa, the Middle East, Eastern Europe, Europe, and North America. Alvean has commercial offices in seven countries (Spain, Switzerland, Brazil, Thailand, Hong Kong, United States, and China) and operations on all continents. We own 50% of this joint venture, the remaining capital being held by our partner Cargill. In the last two crop years, as in previous years, the company reported profits even in an extremely competitive scenario, impacted by the more favorable scenario for ethanol in Brazil. Consequently, Alvean has been making a significant contribution to Copersucar’s results, capturing the increased volatility in market movements.

### Net revenue (US$ million)

- **2018-2019**: 3,070
- **2019-2020**: 2,871

### Workforce

- **2018-2019**:
  - Male: 81
  - Female: 67
- **2019-2020**:
  - Male: 43
  - Female: 43

Alvean commitments

**RELIABILITY**

Our talented team and their commitment to deliver what we promise, considering the highest expectations of our clients.

**EFFICIENCY AND FLEXIBILITY**

Solid logistics, ability to respond and adapt to specific needs, and excellent services to clients.

**CONSULTING**

Extensive specialization in negotiation and risk management, experience in commodities, proximity to producers, and consistent analysis to support our business partners.

**HIGH PRODUCT QUALITY**

Our access to the best sugar producers in the world enables us to supply a wide range of sugar varieties, with privileged access to high-quality products.

**GLOBAL ACCESS**

A global reach, with an international team and local presence.
Eco-Energy operates in the marketing and distribution of biofuels in the United States. Founded in 1992, it is among the industry leaders in North America, promoting innovative solutions and leveraging value generation in the supply chain in the biofuels sector.

In the crop year 2019-2020, the subsidiary sold 9 billion liters of ethanol in the North American market, which represents a consolidation in the ethanol market. Additionally, the company has been diversifying its operations to the natural gas market, which presents an even greater growth trend. Eco-Energy is prepared to meet this increased demand, including in the field of infrastructure and tankage. Since 2017, we have held a 100% shareholding interest in the company, which currently has nine distribution and transshipment terminals, providing more efficient use of railways, the main mode in the country.

We have relevant operations in the two main ethanol producing and consuming countries and understand that there is room for a greater flow of trade between Brazil and the United States. As demand grows, there must be important opportunities for import or export – and we are ready to respond to those demands. Furthermore, the combined operations of Copersucar and Eco-Energy constitute the largest global platform to serve the biofuels market and thus make a clear contribution to the reduction of pollutants and seek to reduce climate change and global warming.

Even in markets in which hydrous ethanol is not considered a large-scale fuel alternative, gasoline blending has a very substantial impact in reducing emissions. In this environment, in which ethanol becomes a global commodity, having the capacity and flexibility to meet this demand is a great opportunity for growth and the way Eco-Energy contributes to our strategy.

Eco-Energy has also been active in the natural gas market since 2017, seeking to expand its activity through investments in the logistics distribution chain, adding value to clients by offering energy solutions applied to the logistics know-how and diversifying the results for the Copersucar. Through Eco-Energy Midstream Solutions, producers of this fuel can connect to industries in a more efficient and more cost-effective manner.
Eco-Energy operations

UNITED STATES OF AMERICA

ETHANOL DISTRIBUTION TERMINALS
1 • Augusta (Georgia)
2 • Cartersville (Georgia)
3 • Knoxville (Tennessee)
4 • Denton (Tennessee)
5 • Charlotte (North Carolina)
6 • Selma (North Carolina)
7 • Filadélfia (Pennsylvania)
8 • Richmond (Virginia) – joint venture
9 • Alexandria (Virginia) – joint venture

NATURAL GAS PROCESSING AND DISTRIBUTION TERMINAL
10 • Rogersville and Hawkins County (Tennessee)

CORPORATE OFFICE
11 • Franklin (Tennessee)
Logum

Established in 2011, Logum is a logistics system for the distribution of ethanol through pipelines. In 2018, Odebrecht Transport and Camargo Corrêa Construções sold their shareholdings in Logum and we now own 30% of the company, alongside Petrobras, Raizen and Uniduto as partners.

After this corporate restructuring, the National Bank for Economic and Social Development (BNDES) approved new financing contracts for the pipeline, which already has three well-defined expansion stages. The first one, currently ongoing, focuses on connecting to the main regions of São Paulo’s distributors. It provides for the construction, by 2021, of an additional 128 kilometers of propriety pipelines to reach São José dos Campos (São Paulo) and São Caetano do Sul (São Paulo), through Guarulhos (São Paulo).

In the second stage, the pipeline will be taken to the port of Santos to allow ethanol to be shipped. The last phase, in turn, consists of taking the pipeline to Jataí (Goiás), close to other ethanol-producing regions.

Logum’s expansion has a positive environmental impact as it reduces the need for trucks on highways and transfers shipping to the pipeline mode. The so-called ethanol pipeline has the capacity to transport 4 billion liters of ethanol per year.

In the crop year 2019-2020, 700 million liters of Copersucar’s ethanol were handled by the ethanol pipeline. This represents*

Reduction of 16,400 truck trips

Savings of 5.6 million liters of fuel

*Own estimate based on the use of trucks to transport ethanol to the same delivery destinations.
Opla

Also, with the 50-50 joint venture model, we have had since 2018 a partnership with BP Biocombustíveis for the management of Opla Logística Avançada. The investee operates an ethanol terminal located in Paulínia, an important connection center between the production mills in the Center-South and the fuel distribution network in São Paulo.

Opla is integrated with Logum’s ethanol pipeline system, which optimizes logistics and provides gains in competitiveness and flexibility in serving the market. In the crop year 2019-2020, Opla handled 735 million liters of biofuel, an 11.5% growth compared to the previous crop.

In a maximum ethanol scenario, with favorable prospects from RenovaBio, the business has the potential to evolve further in the coming years. The company is already working on a strategic growth plan for the next two to three years, which includes expanding the modes for receiving and shipping products, expanding pipeline interconnections and diversifying the movement of fuel products.

The implementation of different projects with this objective is planned in the short term. The first of them, already developed in the crop year 2019-2020, was the railway interconnection with Rumo, from an existing railway terminal in Paulínia. This advance towards the railway mode, which will start operating in August 2020, is the first step towards making Opla a multimodal terminal. This project will place the company among a select group of liquid bulk storage companies that are able to receive ethanol by pipeline, railway and highway - a relevant strategic differentiator for this market.

In the last crop, Opla incorporated a subsidiary of Logum, an initiative that expands the synergy between companies and assets, in addition to providing our clients with greater flexibility in the origination and flow of products between the different regional bases connected to the pipeline systems of Logum and Transpetro. Similarly, the pipeline interconnection with Fuel Storage Terminal (Tercom) is foreseen for the crop year 2020-2021, a close base that may receive the ethanol sold by Opla.

The next goal is to expand pipeline connections with the Petrobras refinery (REPLAN), located in Paulínia, and to develop a railway base within Opla, which are key steps for the diversification of products and services and for the increase in the volumes handled. This project will create the logistical and infrastructure conditions necessary for the expansion of rail transport towards the Center-West and will prevent roughly 6,000 monthly truck trips on the highways of São Paulo, Mato Grosso, and Goiás.

Another opportunity under study concerns the development of a new logistics terminal outside São Paulo for handling ethanol and oil products, in partnership with Ferrovia Norte-Sul, aiming to take advantage of the synergies generated by Opla’s new infrastructure.

Opla’s expansion plans are driven by the appreciation of ethanol and the search for modes with a lower carbon footprint.
The Sugarcane Technology Center (CTC) was created in 1969 as a research and development area for sugarcane varieties at Copersucar. In 2011, already as a private non-profit institution, it was transformed into a corporation, with 154 shareholders. We have a 16.93% interest in the company.

The largest center for the development of sugarcane biotechnology in the world, CTC has repositioned itself in recent years and has delivered a positive result by acting in pursuit of genetic improvement and development of agricultural and industrial technologies for planting, handling, harvesting and processing sugarcane.

In 2018, the North American subsidiary CTC Genomics was inaugurated, expanding the capillarity of knowledge of the technologies developed and placing CTC as an international company. In the same year, CTC obtained approval from the National Technical Biosafety Commission (CTNBio) for its second genetically modified sugarcane variety, with the third type receiving authorization in 2019. Like the first, approved in 2017, the varieties are resistant to borers, the main pest affecting sugarcane fields in Brazil, thereby preventing losses estimated at R$ 5 billion per year due to losses in agricultural and industrial productivity, sugar quality and insecticide expenses. It should be noted that none of the three varieties is a GMO.

CTC expanded borders in 2018 with the opening of a subsidiary in the United States.