

## EXECUTIVE SUMMARIES OF THE PROJECTS

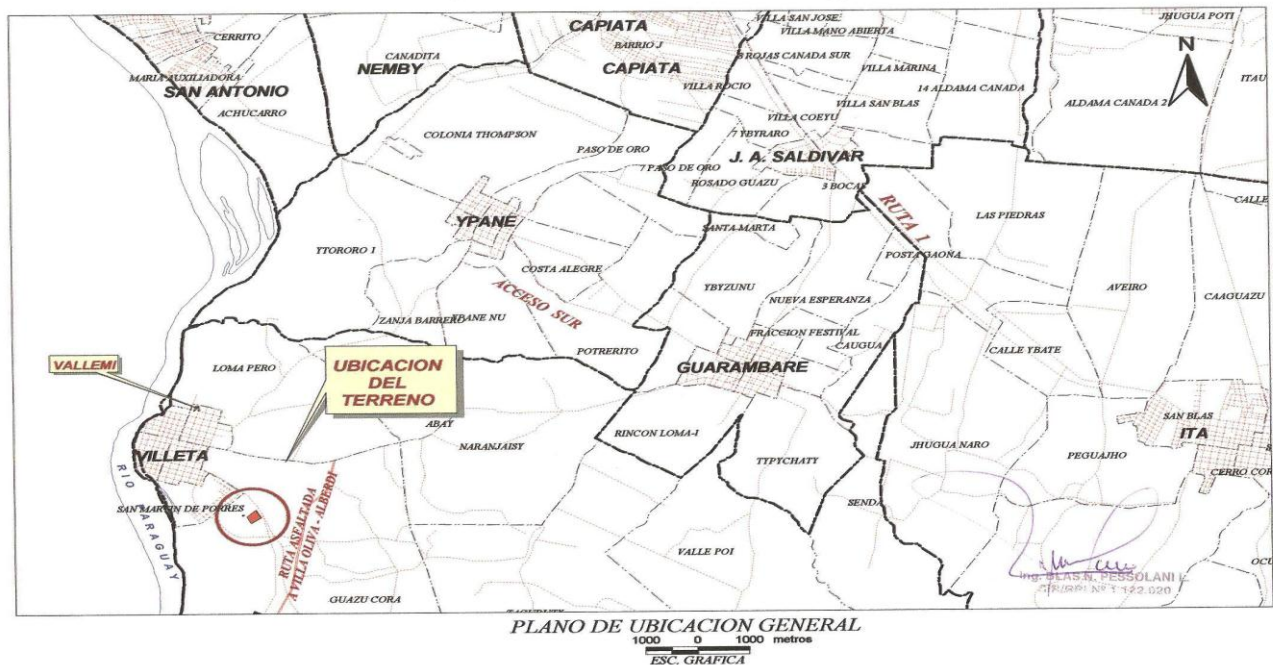
### 1- NEW PLANT CONSTRUCTION – BACKGROUND.

The refinery, distiller, grinder and recuperate will be built and equipped with all the technological advances and under strict safety regulations, with the main objective of processing solvent, paraffinic naphtha and residual oil; and with the purpose of adding value to the products processed in the plant, for subsequent export and sale in the local market. This same operation was carried out in our plant located at Km. 22, international route 7 in Minga Guazú, which we had on leasing. Blending of gasoline with ethanol: we have permission from the MIC and INTN to carry out this operation, which is 6,000 m<sup>3</sup> per month. The Refinery and Petrochemical has permission of 12,000 m<sup>3</sup> per month. With the blending license the manufacture of lubricants and synthetic and mineral fats can be made according to the raw material that is processed, has a fraction of lubricants (olefins). We have a property of 6 hectares for the use of the construction of the new plant, storage and port for loading - unloading that is located in the city of Villeta and we plan to buy a port located in the city of San Antonio – Paraguay.

**Resins of petroleum and plastic** for which it will be possible to make plastic compounds rectification of chemical compounds of butane, naphtha and benzene from which it obtains polypropylene pellets to export to markets in Brazil since in that country the importation of virgin raw material is restricted and in Paraguay it is released so that it will be possible to make compounds and send to that market whenever it is processed in the Refinery and has its certificate of origin.

Solvents thinner and mineral turpentine we import solvents and paraffinic naphtha's from Bolivia, for re-export to third countries. Currently, it can be carried out with ministerial and customs conditions in Paraguay and Bolivia (Mercosur Regime). To carry out this operation, all raw materials must be processed in the country giving added value and thus generate a certificate of origin for export (the refinery can carry out this activity with a petrochemical license)

### Geographic Location.



We already had the hydrocarbon refinery and rectifier plant located in Minga Guazú, 22 km from the border with Foz de Iguazu Brasil and 200 km from the border with Matto Grosso Brazil.

We have 2 towers with a topping capacity of 300 m<sup>3</sup> day and 150 m<sup>3</sup> of butane gas (interface) and another vacuum. The vacuum is deactivated to move to our property near the river Paraguay for reasons of better logistics for the use of barges having a saving of USD. 60,00 for m<sup>3</sup>.



**Distillation and refining of base oils Lubricants, diesel and kerosene**



**Blending para producir lubricantes y grasa**





Minga Guazú plant, vacuum tower and topping

**Description of the product or service**

The oil refining and rectifying refinery plant is designed to treat the products coming from the producing wells and the primary distillation cuts; in order to obtain fractions, with ranges of boiling points more narrow and appropriate, this produces several gasolines, diesel bases for lubricants, LPG butane propane and others such as benzene paraffin's used as raw material and solvent in other industries.

We can also manufacture lubricants and fats

RAW MATERIAL	FINAL PRODUCT
(1 A) Petrochemical naphtha	Thinner- turpentine -White Spirit
	Naphtha - toluene -
	Diluents - additives
(1 B) Paraffinic Solvent	Light and heavy turpentine
	Gasoline Naphtha
	Catalytic reforming (naphtha)
(2 C) Mineral Solvent	Kerosen - Butane Glp
	White Spirit - light diésel
(2 A) Heavy Solvent	diesel oil - lubricant base
	toluene - paraffin
	Gasoline
(2 B) Recon Oil (crude)	Glp Propane Butane
	Naphtha - Gasoline - diesel
	Fuel oil - heavy and light

**2 Distribution: % local /% export; Direct% / indirect%; terms of sale (cash / credit; collection days)**

- ✓ Local : 25%
- ✓ Export (direct) : 75%
- ✓ Terms of sale : Counted (100%)
- ✓ Collection days : 8 days.

➤ **2. CONSTRUCTION OF STORAGE PLANT**

In the building of Puerto San Antonio 11 tanks of 2,000 m3 will be built to store fuels for distribution to the country's own service stations and fuel distributors. We are also reaching an agreement with the US company Petredec. UU to be able to use Paraguay as a strategic location and from here to store and distribute and commercialize the emblems that they buy from Petredec in Paraguay and also in the Mercosur region.

➤ **INVESTMENT**

DESCRIPTION	US \$ AMOUNT
Refinery and Storage Plant in total	12.000.000,00

➤ **INVESTMENT RETURN**

TIME	5 YEARS
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**Model plant Storage Coverage and Open**



### ➤ **3. CONSTRUCTION OF THE MULTIMODAL HARBOR**

The port located in the city of San Antonio, 19 km from Asunción, will build new port facilities (warehouses and administrative offices) and modernize the loading and unloading dock.

The engineering of the project comes to understand all the port infrastructure works to be implemented, but, according to future operational and development needs, this infrastructure can be expanded modularly. The characteristics of the 'Puerto San Antonio project', which are appropriate to the national reality are the following:

#### **1.- ENVIRONMENTAL IMPACT STUDY AND ENVIRONMENTAL LICENSE**

The derivatives of a Port to be built in a section of the Paraguay River that has a natural environment that is necessary to maintain. Therefore, it is necessary to prepare the Environmental Impact Study with its environmental record, which must be covered by the Environmental License of the Ministry of the Environment, issued by the competent authority.

#### **2.- CONDITIONS OF OPERABILITY.**

**The projected fluvial port meets the following conditions of operability**

- It allows easy access to the vessels that use the port.
- The navigation channel has an estimated width of 400 meters from shore to shore, therefore, it is wide enough to carry out maneuvers of berthing, sailing and approaching the roadstead.
- It has good protection against high winds and waves.
- Feasible access to intermodal transport systems, especially a good level road in the first instance.
- The port will have elastic defenses type fenders that cushion the effect of the impact of the barges or motor boats that they make on the frontis of the dock
- The dimension of the port will be adequate to allow the handling of lifting cranes, conveyor belts and other mechanical loading equipment

In fact, the area where Puerto San Antonio will be installed in the Paraguay River, fully complies with the requirements required to efficiently operate a river port, because it harmonizes the operational needs of the dock with the natural conditions of the waterway to be used, such as

- Good hydraulic conditions of the Alto Paraguay River. In this way there are no strong winds or any wind disturbance that prevents the construction of the port.
- Good natural protection against possible periodic floods that are observed annually in the area
- Adequate water level that will ensure the pier to the mainland.

### 3.- DIMENSIONES Y CAPACIDAD DEL PUERTO

The port will have the following dimensions: 75 m. of length, by 15 meters of beam, by 2.50 m. of strut, which must have 2.00 m. of draft by 0.50 m. of freeboard.

The main deck of this dock may contain a weight of 80 tons, especially when loading maneuvers are executed using mechanical equipment, such as: cranes, conveyor belts, forklifts or tecles.

The maximum capacity to mobilize and accommodate fluvial convoys on this floating dock will be 200,000 T.M./year.



**Aerial view of the port located in the city of San Antonio  
Dimensions of the land 4 hectares.**

➤ **INVESTMENT.**

DESCRIPTION	AMOUNT U\$S
Construction of the Port in total.	5.000.000,00

➤ **INVESTMENT RETURN.**

TIME	5 YEARS
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**Aerial view overlooking the river of the port of San Antonio Central Dept.**

➤ **4. ETHANOL PLANT.**

Alcohol and ethanol plant is located in the city of Coronel Oviedo - Department of Caaguazú, we have agreed with the liquidating commission of the cooperative Cnel. Oviedo according to the offer letter for the total purchase of Ethanol plant assets located in the city of Carayao with a production capacity of 90,000 liters of fuel ethanol for mixing with the gasoline produced in the refinery plant.

The blending that is mandatory by government provision 27% must be the amount of Ethanol in all gasoline. Where we will use to supply the Petrochemical Plant. We need to make investments to increase production such as sugar cane plantation distillation and storage equipment.

For us it is good business because alcohol would be sold inside gasoline at a price of gasoline because it has a very fluctuating market according to the good or bad harvest however gasoline always has a good price.

➤ **INVESTMENT**

DESCRIPTION	AMOUNT U\$S
Total ethanol plant	13.000.000,00

➤ **RETOURN TO DE INVESTMENT.**

TIME	5 YEARS
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**PLANT ETHANOL CORONEL OVIEDO**



**Ethanol plant production 90 thousand liters a day for mixing with gasoline, the production of ethanol will have more added value in gasoline.**



**Blending equipment for mixing ethanol with mandatory gasoline due to government regulations for the use of Ethanol in gasoline and diesel.**

➤ **Final Comments.**

The success of the company will be based on the increase of its financial resources, which should be managed efficiently, applying techniques to consolidate the competitive advantages and achieve excellence in business management, taking into account the effect on future actions, contemplating the changes that could arise in the

environment and taking maximum advantage of the resources available to achieve an increase in productivity and competitiveness.

**ORCA PETRO S.A.C.I.**, is the only company in Paraguay to date with all petrochemical refinery licenses, alcohol import blending that has been enabled by the Ministry of Industry and Commerce, INTN, Senad, Ministry of Public Health and Customs. Outside authorized by Yacimientos Petroliferous Fiscales Boliviano (YPFB) for the purchase of petroleum derivatives. Refinor YPF in Argentina as raw material supplier and qualified by Enarsa (Argentine Energy Secretariat). Foxpetrol from Argentina. Pampa Refinery of Argentina.

## A. TARGET MARKET

### 1. Country / Destination

- ✓ Local market : Paraguay
- ✓ International Market : Brasil

### 2. Size estimation and annual market growth rate (last year, five year projection).

Currently there is a demand for products, of approximately 30,000 m<sup>3</sup> per month, which market we want to occupy distributed as follows:

	MARKET	M <sup>3</sup>
	Local	5.000
	International	6.000

## **Production of lubricants and industrial greases for national and international market under API standard**

### 1. Source of income

These projects of new refinery and petrochemical refining facilities for petroleum products, fuel storage, and the Alcohol plant seek funding for initial investments in the medium term. These initial investments will provide the necessary funds for infrastructure works and for operating capital.

Once put into operation, the companies will be able to generate the necessary funds to cover their operating costs and to guarantee the initial financing, on the basis that 100% of the monthly productions of the plants will be acquired entirely by the local and international market. .

**Amount of required investments with a five-year projection.**

DESCRIPTION	AMOUNT U\$S
a) Refinery and Petrochemical Plant	12.000.000,00
b) Ethanol plant Colonel Oviedo	13.000.000,00
c) Multimodal port	5.000.000,00
<b>TOTAL INVESTMENT REQUIRED</b>	<b>30.000.000,00</b>

➤ **INVESTMENT**

DESCRIPTION	AMOUNT U\$S
Inversiones en total	30.000.000,00

➤ **RETOURN TO INVESTMENT**

<b>TIME</b>	<b>5 YEARS</b>
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