





AND RENOVATION ORGANIZATION

#### **Petroleum Coke Project** 500 million euros (estimate) Investment estimate The target is to produce approximately 200,000 tonnes per year of calcined petroleum coke usable Arvand free zone, Khoramshahr city, Khoozestan province Location in aluminum smelting industry and to produce 200 ktonnes of calcined petroleum coke Product other by-products such as LPG, Naphtha and Gas oil. The feed is vacuum bottom of local oil 100% Imidro (Government) Shareholders refineries. The feasibility studies are done however Imidro is planning to prepare a bankable feasibility Execution EPCF/BOT study by an international consultant. A land is designated for the project in Arvand Free Zone in Khoozestan Province and 27000 barrels of feed per day from two local oil refineries have been allocated for the plant by the Ministry of

Petroleum. The environmental permissions have

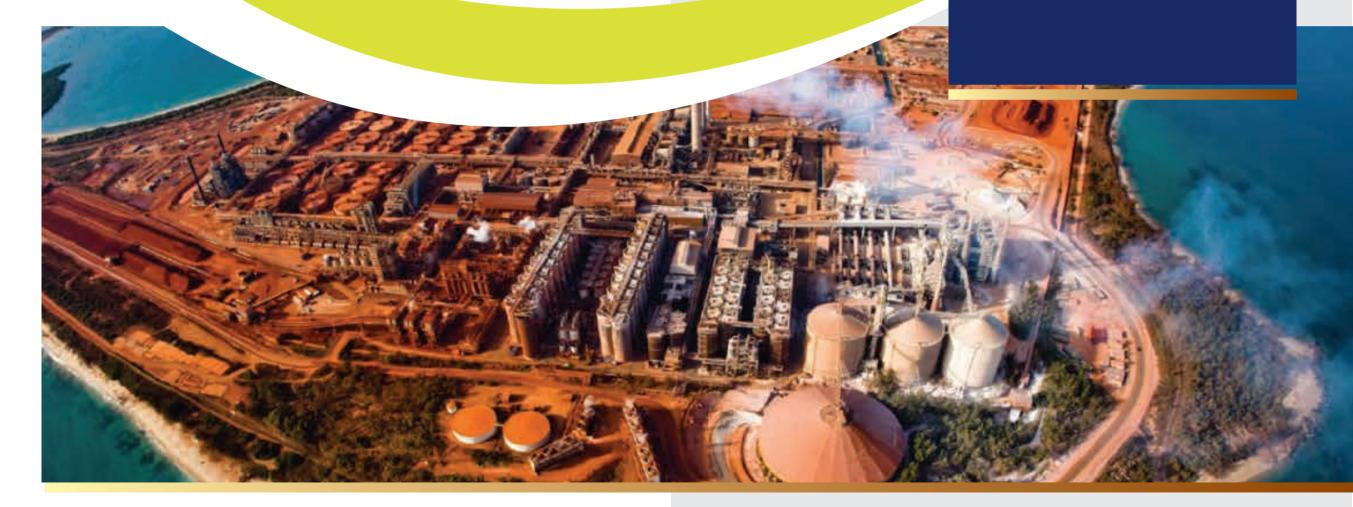
been issued.

Investment estimate	1.5 billion euros (estimate)
Location	Parsian Especial Zone
Product	1600 ktonnes of alumina from bauxite per year
Shareholders	100% Imidro (Government)
Execution	EPCF/BOT

## Persian Gulf Alumina Project

The target is to produce of 1,600,000 tonnes per year of alumina powder from imported bauxite. The bauxite is to be imported from Imidro's mine in Guinea Conakry however options of bauxite supply from other mines are also considered. The project is ready to go to EPCF tender or investment.





#### **SBDT Bauxite Mine**

The target is extraction of 4 million tonnes of bauxite per year from SBDT's Dabola and Tougue bauxite mines in Guinea Conakry. SBDT is a joint venture between Imidro (51%) and Guinean government (49%). The bauxite will be transported in slurry form by pipes from mine to the port (325 kilometers) where a jetty, loading and dewatering facilities will be built. The bankable feasibility studies are being prepared by a credible European company.

Investment estimate	505 million euros (estimate)
Location	Guinea Conakry
Product	4 million tonnes of bauxite per year (phase 1)
Shareholders	51% Imidro- 49% Guinean Government
Execution	EPCF/BOT





Investment estimate	850 million euros (estimate)
Location	Sarab, East Azerbaijan
Product	200 ktonnes of alumina and industrial salts
Shareholders	100% Imidro (Government)
Execution	EPCF/BOT



## Sarab Nephelin Syenite

The target is to produce of 200,000 tonnes of alumina from nepheline syenite, industrial salts (carbonates and sulphates) and a 3-million cement plant from belite mud. The project has an allocated land, its own nepheline syenite and lime mines. The required infrastructures (power, gas and water) have been installed and some are complete. Most of critical permissions are received. Administrative buildings are built too. In 2014, a contract for basic engineering of the plant was awarded to Outotec as one of the few technology owners of this exclusive process. The negotiations are underway with EPCF contractors to find a solution to construct the project.

## **Newly Defined Projects**

# 1-Upstream Aluminium: Two smelters and an anode plant

- Two 350,000-tonne smelters with 1000-MW captive power plants of their own have been defined and Imidro is now looking for EPCF contractors and investors. The technology would be 400-kA.
- An Anode plant with 400 thousand tonnes of capacity enough for 700,000 tonnes of primary aluminium to produce.

Investment estimate	2 billion euros each (smelter + power plant) (estimate)
Location	Southern coasts of Iran
Product	350 ktonnes aluminium ingots + 1000 MW electricity
Execution	EPCF - Investment

Investment estimate	450 million euros (estimate)
Location	Southern coasts of Iran
Product	400 ktonnes anodes
Execution	EPCF - Investment



Investment estimate	1 billion dollars (max, estimate)
Location	-
Product	50150- ktonnes Billet/50 ktonnes Wire & Rod/ 200 ktonnes FRP
Execution	EPCF - Investment





#### 2- Downstream Aluminium: Four downstream aluminium plants to produce semi-finished and finished products have been defined.

- Two Aluminium Billet plants of 50,000 and 150,000 tones of capacity: The target is to use molten aluminium or ingots from close smelters to produce alloys series (6000) cast in shape of billets with diameters of 512- inches and max 7 meters longitude.
- One Aluminium Wire and Rod plant with 50,000 tones of capacity: The target is to use molten aluminium or ingots from close smelters to produce alloys of 1000, 6000, 8000 cast and rolled in shape of rods and later drawn into conducting cables (overhead transmissions) and building wiring (civil structures). The rod will be 9.523- mm in diameter. Half of the rod capacity will be used to produce cables ACSR, AACSR, AAC, AAAC
- One FRP (Flat Rolled Products) plant with 200,000 tonnes of capacity (expandable to 400,000): The target is to produce rolled products in CBS (Can Body Stock), CES (Can End Stock)

# South Aluminium

The target is to produce of 300,000 tonnes per year of aluminium ingot and billets. The EPCF contractor is NFC of China and the technology is SY430 of China. The construction has been started in December 2015 and the first hot metal will be produced in Q3 of 2018.

Investment estimate	1.2 billion dollars
Location	Lamerd Special Zone
Product	300 ktonnes of aluminium ingots and billet
Shareholders	51% Ghadir- 49% Imidro
Execution	EPCF





Investment estimate	132 million euros
Location	Jajarm, North Khorasan
Product	36,6 ktonnes of aluminium ingots
Shareholders	100% Imidro (Government)
Execution	By Iran Alumina Co. and NFC



## Iran Alumina Company

The company has an operational bauxite mine and an alumina refinery of annual production of 700,000 tonnes and 250,000 tonnes respectively. An aluminium smelter of 36,600 tonnes to be developed to 110,000 tonnes later is under construction with around 55% of progress. The aluminium project is explained in figures in the table below.

