AZPROMO PROJECT PLAN

PROJECT: Chlorides Hydroxides and Caustic Potash Production project

Contents:

1) Background and Sector review

Chemical production in Azerbaijan

Before 1990, Azerbaijan produced over 70% of key chemicals for the Soviet Union. Production declined after Independence, but since 2009, the value of chemicals produced in Azerbaijan has grown to reach 187 Million Manats in 2013. Chemical production is located in Baku, Sumgait, and west of Absheron in Ganja, Salyan and Neftchala, due to the availability of the main source materials. These include oil and gas, salt, iodine-bromide mine water, and waste of ferrous metals.

Chlorides, Hydroxides and Caustic Potash Production in Azerbaijan

The Government wants to move Chemical production towards high-technology techniques, and it is regulating production to the highest standards of environmental protection. A key part of this strategy is Sumgait Chemical Industrial Park (SCIP).

According to the master plan of the SCIP, the park will include territories planned for production of agricultural, medical, consumer, construction industry, electronics and automotive chemicals, polymers and industrial equipment. In particular, this location has rail access to the Alat Sea Port, giving market access to Central Asia. The European market is accessible through the Baku-Tbilisi-Kars railway.

Although the chemical sector is dominated by the state chemical company, Azerkimya, there are successful foreign investors, including the German company BASF.

Increasing regional demand

These chemicals are widely used in the production and processing in the oil, agriculture and food industry. Similarly they are used as raw materials in the synthesis of other chemical products.

They are used in the production of fertilizers, bio-diesel, and household and industrial cleaning chemicals, like soap.

The global market for soap, surficants and industrial cleaners, is forecast by 'Research and Markets' to grow at 5.3% up to 2020. It is valued at US$42 Billion. The increasing rates of urbanization mean the main growth regions are Central Asia other parts of Asia. Azerbaijan is well placed to serve these markets.

Access to relatively cheap energy gas in Azerbaijan

The biggest cost component in Chlorides and Caustic Potash production are energy costs. This puts Azerbaijan in a relatively advantageous position, due to its location near the Shah Deniz Natural Gas field, which is one of the largest natural gas fields in the world. The Sumgait Industrial Chemical Park (SCIP) is near this field, only 30kms from Baku.

2) Project Objective

- To establish an Inorganic Chemicals production plant (Chlorides, Hydroxies and Caustic Potash).

3) Project Description

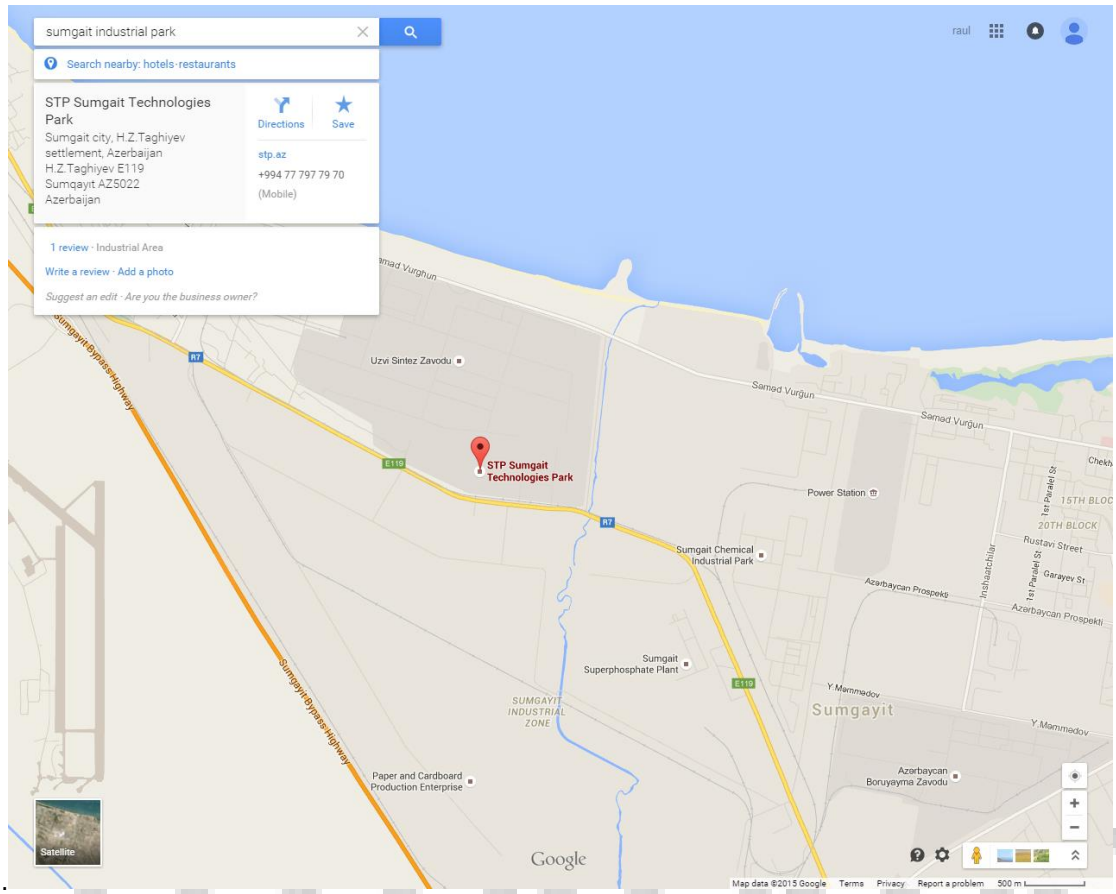
To create a Chemicals Production facility in Sumgait Chemical Industrial Park. This is near the main

inputs to the production process of a power station. Its strategic location on the Caspian Sea, and access to transport links (the Elat Sea Port, and Baku- Tbilisi-Kars railway), will give the proposed facility access to raw materials, and buyers in regional markets.

4) Location Description: Sumgait Chemical Industrial park

Sumgait Chemical Industrial Park, is well suited to the production of inorganic chemicals..

The map below shows the park is close to a power station for the supply of cheap energy, has good transport links, and for the supply of raw materials.



Incentives: Residents of the park are exempt, for 7 years from property tax, land tax, corporate income tax and VAT on imported equipment for up to 7 years.

For more details see http://www.scip.az/index.php?lang=en

5) Marketing Strategy

Market Size: The global market is forecast to be worth US$42 Billion. The regional market is significant. In 2014, Turkey imported US$1.3 Billion.

Key Customers: The main regional consumer of Inorganic chemicals is Turkey (importing US$1.3 Billion in 2014, and US$1.5 Billion in 2013). Whilst Kazakhstan imported US$0.3Million in 2014.

Key Competitors: The main regional supplier of inorganic chemicals is not Russia, but Kazakhstan, which exported US$2.6 Million. This is insufficient to meet regional demand.

Competitive Advantage of Azerbaijan: A key advantages for chemical production in Azerbaijan are:

1) its proximity to the key customers of Turkey and Kazakhstan, through the opening of the Baku -Tbilisi-Kars railway,

2) access to large suppliers of cheap energy.

6) Production, Manufacturing Operations Overview

The large-scale production of chlorines, hydroxies and caustic potash production facility will involve the following processes. It is very energy intensive, so access to cheap energy is vital. The plant will consists of:

- brine production/treatment,
- cell operations,
- chlorine cooling & drying,
- chlorine compression & liquefaction,
- liquid chlorine storage & loading,
- caustic handling,
- evaporation,
- storage & loading and hydrogen handling.

7) Project Management and Organization Structure

The Project will be led by the Sumgait Industrial Park, with support from AZPROMO.

The proposed financial scheme and share distribution is negotiable. The project envisages the majority of the financing, and share ownership will be from the investor.

8)Project implementation schedule

The project will take up to 2 years to be realized, from initial creation of project team to final marketing of the Fertiliser.

Project Implementation				
	Year 0,5	Year 1	Year 1,5	Year 2
Project Team				
Location review and acquisition				
Site operations construction				
Asset and Equipment Procurement				
Asset Testing				
Marketing				

9)Estimated Budget and balance sheet

The assets focus on the capital expenditure for equipment, whilst the main liabilities relate to energy costs.

NPK Fertiliser Estimated Project Balance Sheet							
	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7
Assets US$ Million							
Cash	1	1	5	5	7	7	7
Land	1	1	1	1	1	1	1
Building	2	2	2	2	2	2	2
Equipment	150	150	150	150	150	150	150
Total Assets							
Liabilities	105	95	85	75	65	55	45
Owners Equity	50	60	70	80	90	100	110