

Caustic Soda/PVC/Soda Ash Production Project

Project Summary

Subsector	Heavy Industry
Location	Sheberghan, Jozjan Province, Afghanistan
Project Cost	\$40.0 Million
Project Type	Manufacturing
Project Executing Firm/Agency	Qaderi Group
Funding Agency	Not Identified



Project Outline

Hamid Qaderi is a prominent Afghan businessman who operates the foremost freight forwarding operations in Afghanistan. The Qaderi Group is proposing to construct a plant at Sheberghan to produce caustic soda, PVC, and soda ash. The envisaged plant is expected to have a capacity of 20,000 ton per year of soda ash and 15,000 tonnes per year of caustic soda. The project will require a formal feasibility study to examine the market for caustic soda and soda ash and investigate the availability of raw materials. At present the market for caustic soda and soda ash is limited, but is expected to grow as local industries develop, such as textiles, cotton seed oil refining, by-products of soap manufacturing, oil and natural gas drilling, sugar milling, glass production, petroleum refining, and urea production that all require the product. Finally raw materials, such as washed salt, natural gas, ammonia, limestone, and naphtha necessary for this production are available nearby.

Technical Description

The promoters have copies of two previous feasibility studies conducted by the Afghan government relating to this project. However, a formal feasibility study is required.

It is anticipated that the project would start on a modest scale and will be expanded in the future.

Project Site

It is proposed to build a production facility at an industrial site in the city of Sheberghan, Jozjan Province.

Project Status/Timeline

Following completion of the feasibility study, construction is expected to take two to three years.

Equipment and Services

Based on the findings of the feasibility study, some or all of the following equipment may be procured:

Dual Process Plant:

- Main reaction tank
- Steam jet refrigeration plant
- Cooler
- Separation tank
- Concentrator
- Ammonium chloride centrifuge
- Rotary dryer
- Granulator
- Motherliquor tank
- plant for soda ash (light and heavy)
- Carbonating tower
- Condenser
- Rotary filter
- Wet calciner
- Steam-tube dryer
- Hydrator (for heavy ash)
- Calciner (for heavy ash)
- Soda ash bin
- Bagging

Chemical Caustic Plant:

- Vertical shaft kiln (gas fired)
- Elevator winch for limestone charging
- Trolleys for limestone charging
- Lime handling system
- Wet-calcined sod solution storage tank
- Rotary table feeder

- Rotary drum slaker
- Lime classifier
- Caustic reaction tank
- Soda liquor thickener tanks with mechanism
- Rotary vacuum filer
- Vacuum filer
- Filter receiver tank
- Cascade condenser
- Washing thickener tanks with mechanism
- Lime mud agitation
- 50 percent lye storage tank
- Polishing filter
- Centrifugal pump sets
- Instruments
- Triple effect caustic soda evaporator complete with jet vacuum system and cascade condenser

U.S. Competitiveness

The U.S. is a leader in caustic soda production. Based on the findings of the feasibility study, a U.S. firm could act as the technical investor providing the production equipment and possible operation management.

Project Financing

The project promoter is prepared to provide a modest degree of investment capital and in-kind contributions for the start-up of the project. OPIC is interested in funding for export-oriented projects of this nature. The sponsor is seeking a strategic technical joint-venture investor to help develop the project.

Key Decision Makers

Organization or Company Name	Qaderi Group
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