

**Project title:** Chlor-Alkali

**Products/Services:** caustic soda and liquid color

**Project description:** The chlor-alkali process, in addition to producing liquid chlorine, yields a critical chemical compound known as caustic soda. Caustic soda is a pivotal element in various chemical industries. It's noteworthy that the primary input material for sodium sulfide production, an essential component in ore processing for mining, is caustic soda. Caustic soda boasts a significantly high export value. The technology employed in its production has reached an advanced stage and is exclusively manufactured by a select few companies. In the modern chlor-alkali industry, the two principal products, caustic soda and chlorine gas, are simultaneously generated from an aqueous salt solution. The production ratio of these two commodities is predominantly one ton of caustic soda to each ton of chlorine gas. In addition to these primary products, hydrogen gas is produced at an approximate rate of 28 kilograms per ton of chlorine gas. This hydrogen gas, as a byproduct of the production process, is utilized on-site and may find application as a fuel or in hydrochloric acid production.

**Location:** Kerman-Iran

**Annual capacity:** 40,000 Ton Caustic soda flakes caustic or 80,000 Ton caustic soda 50%

## Financial Structure

### Financial Table

Description	Equivalent in Euro
Fix Capital	23,992,320
Working Capital	2,162,867
Total Investment	26,155,186.49

- Value of foreign equipment/machinery 20,339,490 €
- Value of local equipment/machinery 3,652,830 €
- **Net Present Value (NPV):** 595,402,591,501 IRR for 5 Year
- **Internal Rate of Return (IRR) :** 39%
- **Payback Period (PP) :** 2.5 Year

## Project Status

**Local / internal raw material access** 100 %

**Sale :** Anticipated export market 70%

**Construction Period :** 18 month

### Project Status :

- Feasibility study available? Yes  No
- Required land provided? Yes  No
- Legal permissions (establishment license, foreign currency quota, environment, etc) taken? Yes  No
- Partnership agreement concluded with local/foreign investor? Yes  No
- Financing agreement concluded? Yes  No
- Agreement with local / foreign contractor(s) concluded? Yes  No
- Infrastructural utilities (electricity, water supply, telecommunication, fuel, road, etc) procured? Yes  No
- List of know-how, machinery, equipment, as well as seller / builder companies defined? Yes  No
- Purchase agreement for machinery, equipments and know- how concluded? Yes  No