



Silica Sand In Jordan

Silicon Leads The New Technological Revolution
Its, *The Solar Panels Industry*



Investment Opportunities in Silica Sand

Silica sand is an industrial term used for sand or easily disaggregated sandstone with a very high percentage of quartz (silica) grains. Silica sands have a large number of industrial uses depending on their characteristics such as:

- Production of Glass.
- Foundry Sand.
- Ceramics.
- Sandblasting and other abrasives.
- Building products.
- Filler and extender.
- Production of Silicon and Silicon carbide.
- Pigments.
- Hydraulic fracturing.
- Ultra high Silica Products in Electronic and Fiber Optic industries.
- Water Filtration.



In Jordan, some very significant silica sand deposits are known from four areas ([Ras En Naqb](#), Qa Disi, Wadi Siq and Petra), that are located in the south Jordan, but the most important one is Ras En Naqb which was investigated in different levels.

Silica sand is characterized by the following:

- ◆ Exposed on the surface, so it is easily mineable by open-pit mining.
- ◆ Low content of impurities and heavy minerals, which means it has a high level of purity that facilitate processing and thus get a high value-added products.
- ◆ Close to the Aqaba port.
- ◆ Huge Reserve.
- ◆ Easily accessible area.

These advantages are considered an incentive to exploit silica sand in Jordan.

Many technical studies were conducted on Ras En Naqb silica sand Such as:

- A comprehensive exploration program was carried by Natural Resources Authority, indicated that huge reserve of silica sand in Ras En Naqb is promising for many industrial applications. ([Down Load PDF Report](#)).
- In 2000, Geoindustry Company from Czech Republic did a Geological and Technological Evaluation of Selected Mineral Resources in Jordan (Glass Sand), the study revealed that silica sand deposits from Ras En Naqb are very promising and can be used to produce the following products: ([Down Load PDF Report](#)).
 - *Green Decoration glassware*
 - *Luxury Barium Crystal*
 - *Luxury Lead Crystal*
- In 2009, Jordan Investment Board (JIB) in cooperation with The European Union did a pre feasibility study about silicon metal production, a material that features in the supply chains of several industries, would enable Jordan to enter a new phase in industry, a phase close to renewable energy, Silicon metal is an essential input for the production of Photovoltaic (PV) used to generate electricity from the sun.

These studies have also indicated through the results of analysis that the silica sand deposits are very promising and can be utilized for a variety of industrial purposes without or after simple upgrading processes depending upon which grade of glass quality is required. Only in the case of the production silicon metal used in electronics (silicon chips.... etc.) and in the photovoltaic industries, processing at a molecular level is required in order to remove trace elements from the atomic lattices of the silicon metal to produce ultra-pure silica sand required for this industry.

Also the establishment of glass industry in Jordan is considered a promising investment opportunity due to the fact that Jordan currently does not have any facility for the production of glass, Where Jordan currently imports all types of glass, and hence the manufacture of glass may both contribute to the import substitution as well as allow Jordan to export glass within the region to countries that are not presently producing glass.

Based on the foregoing, the Jordanian silica sand is considered a national treasure unexploited optimum exploitation to date, which gives it a high added value, therefore, the Ministry of Energy and Mineral Resources (MEMR) welcomes local and international firms and investors that are interested in benefiting from the unlimited opportunities associated with Silica Sand.

Note: For More Information and inquiry can be contacted at the following address:

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