

GRAPHITE ELECTRODE PRODUCTION

INVESTMENT OPPORTUNITY SCORECARD

MINING & METALS



GRAPHITE ELECTRODE PRODUCTION

Opportunity Description: Build a plant for Graphite electrode production in order to serve the steel industry market

INVESTMENT OVERVIEW

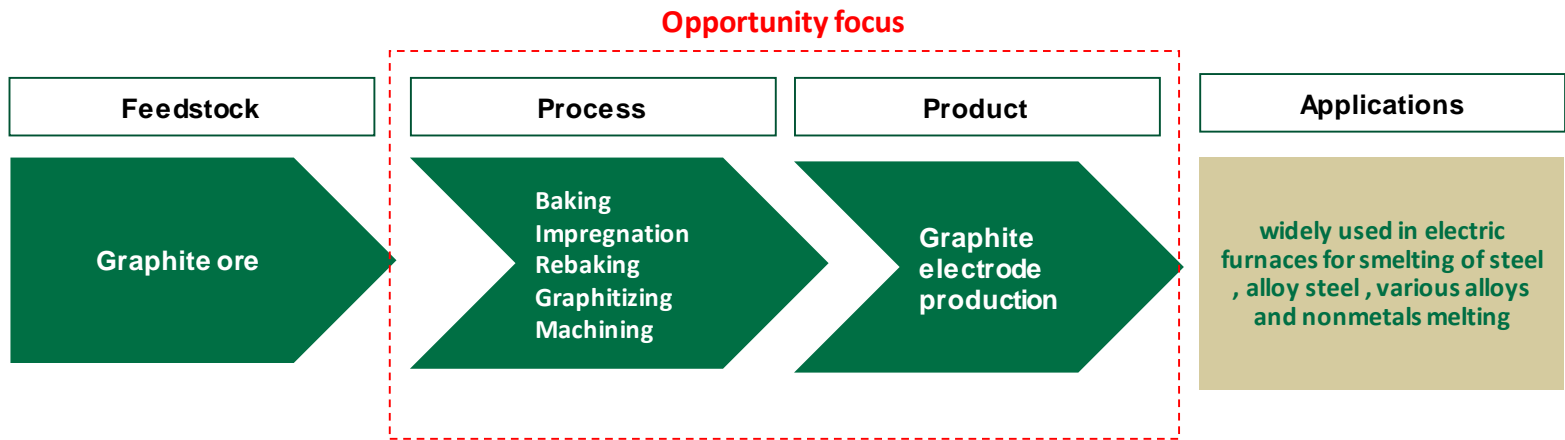
INVESTMENT HIGHLIGHTS

- Expected investment size of USD 200 Mn
- Proposed capacity: 70 ktpa
- Graphite electrodes are the main heating element used in an electric arc furnace, a steelmaking process where steel is melted to produce new steel. Electrodes are made of graphite because only graphite can withstand such intense heat.

BUSINESS DRIVERS

- KSA has developed a steel strategy aiming to achieve 2030 targets by doubling its current steel production capacity which will drive the demand of the Graphite electrode
- The strategy targets to increase steel industry GDP contribution from USD 3 Bn to USD 7 Bn, reduce its imports by USD 1 Bn, and produce a value added products
- Local Demand with the current steel production capacity, could be estimated at 12 ktpa per year (up to 3 Kg per ton of steel)
- Consumption by 2035 along KSA is estimated to be 45 ktpa due to the increase of steel production
- Estimated demand in GCC for 2035 could be evaluated at 60 ktpa
- KSA is the largest steel producer in the region as its currently importing the majority of the graphite electrode

VALUE CHAIN ANALYSIS



GLOBAL TREND

- Growing demand for steel in construction, oil & gas, and automotive industries is expected to fuel the graphite electrode market
- Strong Growth in Steel Production in Emerging Countries
- The growing production of motor vehicles, along with the expanding residential construction industry, is expected to support the domestic demand for non-ferrous alloys and iron and steel which require a graphite electrode product

DEFINITIONS

#	SCORECARD SECTION	DEFINITIONS
1	Market size	Size of market in value/volume in KSA and/or Region (MENA/GCC) covering future projections based on available estimates from published /government sources
2	Business drivers	A select number of factors that will influence future demand for the related product/service
3	Investment highlights	An overview of key financial metrics summarizing the investment opportunity along with the expected return based on the suggested investment size
4	Value proposition	Summary of key differentiators that position KSA as a strategic choice over other regional/global peers
5	Market readiness	An overview of KSA market structure, market maturity and level of participation by local and global players
6	Competitor analysis	List of the local & international players manufacturing the underlying product in Saudi Arabia and their market share
7	Global trends	Latest business developments within the sector/product category
8	Scalability and localization	Ease of scaling the business across the value chain or into new adjacent products or geographies that would maximize the opportunity's investment returns and the ability and potential to locally manufacture the product and its components
9	Import dependency	An overview of the countries from which Saudi Arabia is importing the product and their value/volume and share in total imports
10	Value chain analysis	The process or activities that would potentially need to be carried out to deliver the underlying product or service
11	Key stakeholders	Government institutions, organizations, and/or authorities that participate or influence the market for the underlying product/service
12	Enablers	Factors that enable investment in the underlying opportunity
13	Cost of doing business in KSA	Key factors that position KSA as a competitive destination for investment in the region. Productivity adjusted wages do not include cost of \$1.23/hour towards annual recurring charges including work permit, resident identity (iqama) and health insurance

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