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2020

KSA GCC

ENERGY & WATER SURGE AND LIGHTNING ARRESTORS

OPPORTUNITY'S DESCRIPTION: Setting up a manufacturing and assembly plant for surge and lightning arrestors in KSA

DEMAND

MARKET SIZE, USD MN

140

2022

Market size estimate based on Saudi Aramco forecasted demand





- Expected IRR: 10%
- Opportunity to consider different operating models pure private sector model or joint venture with local player
- Expected timeline to setup the manufacturing and assembly plant is 3-4 months
- Estimated cumulative transmission HV (High Voltage) substations capacity target (KSA – 214K MVA) over 10 years

VALUE PROPOSITION

- KSA's geographical location enables local manufacturers to establish energy network linkages with neighboring countries
- Opportunity to cater local market as well as double-fold regional demand growth
- First mover advantage given limited presence of global manufacturers and assemblers of surge and lightning arrestors in KSA
- Presence of large-scale potential buyers for surge and lightning arrestors with strong preference for local procurement such as Saudi Electricity Company and Saudi Aramco
- Leverage recent FDI measures such as 100% foreign direct ownership to motivate private sector participation in KSA energy sector

KEY DEMAND DRIVERS

2021

 KSA plans to expand its power generation capacity to meet rising demand from residential, commercial and industrial sectors

2023

2024

2025

- Factors like growing usage of electrical equipments and need for their increased protection will lead to higher demand for surge and lightning arrestors
- Also, growing demand for surge arrestors in the telecommunication networks and need to reduce the adverse impact of lightning is expected to further boost demand for surge and lightning arrestors
- Furthermore, establishment of special economic zones and industrial clusters would further drive the demand for power distribution and transmission products

MARKET READINESS AND COMPETITOR ANALYSIS

- There are no local manufacturers and assemblers for surge and lightning arrestors in KSA
- Leading global manufacturers serve local demand through distribution offices/sales representatives

COMPETITOR ANALYSIS









GLOBAL TRENDS

- Global arrestor market in 2020 was USD 1.5 Bn and is projected to grow at 4.9% p.a. until 2025 to reach USD 1.9 Bn
- Increasing demand for power and upgradation of existing electrical infrastructure would further support the global growth for surge and lightning arrestors
- Global arrestors market is highly fragmented and marked by presence of global and local players. Key players in this market include Mitsubishi, Siemens, Toshiba, and ABB





ENERGY & WATER

SURGE AND LIGHTNING ARRESTORS

SUPPLY

SCALABILITY AND LOCALIZATION

Grade:

Low



n F

High

 Presence of multiple local suppliers for key raw materials such as aluminum (Ma'aden), copper cables (Alfanar), metal oxide (Maadaniyah), polymers (SABIC), and resins (Napco national)

 Testing for surge and lightning arrestors is locally possible through services provided by multiple private and government service providers such as SASO, GCC Laboratories, and Advanced inspection Services Co.

Low cost of construction, labor wages and utility fees to support low capital and operating expense for the investors

IMPORT DEPENDENCY

 Currently, majority of the local demand is met through imports

Country	% of Saudi imports in 2019			
China	38.7%			
Germany	24.2%			
USA	7.5%			
Others	29.6%			

Source: UN COMTRADE

VALUE CHAIN ANALYSIS

Generation		Transmission			Distribution	
	ower formers	HVS switchgear	EHV Cables	Substation protection	Cabacitor Banks	
Raw materials) Ma	anufacturing	Assembly	>	Testing	
 Aluminum Copper / cables Metal Oxides Polymers Epoxy Resin Fiber Zing Oxide, Thurite 	HousRodsMetal	0	Housing assemblyMounting bracket assembly		High voltage testing Lightning current stress testing Energy discharge testing Short circuit testing	
Zinc Oxide, Thyrite Silicon carbide Local suppliers currently not available	 		Main Opportunity F	ocus		

KEY STAKEHOLDERS

INVEST 🍣

SAUDI 😾







ENABLING FACTORS

ENABLERS

- Custom duty drawback & exemption
- Up to 75% of project financing by Saudi Industrial Development Fund (SIDF), with two-year grace period for the repayment of loans
- Land for lease starting from \$ 0.26 per sqm

COST OF DOING BUSINESS IN KSA

100% foreign direct ownership allowed

Ranking Amongst Regional Peers Factor \$48 Electricity tariffs for industrial players /MWh Productivity adjusted \$3.3 wages /hour Logistics Performance Index 3.2 (1 - 5)**Customs Clearance** Index 2.7 (1 - 5)Ease of getting credit

Top

25%



(0 - 100)

50

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	Demand 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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