

Electric Motors (*Wave 1*)
INVESTMENT OPPORTUNITY
Machinery and Equipment



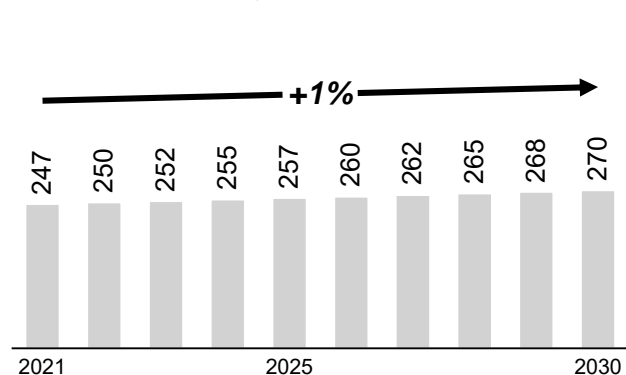
Machinery and Equipment

Electric Motors

OPPORTUNITY DESCRIPTION: Attract leading global players to setup electric motor manufacturing base in KSA

DEMAND

KSA market size, USD Mn



INVESTMENT OVERVIEW

INVESTMENT HIGHLIGHTS

- Cumulative GDP contribution (Year 10): USD 515 Mn
- Total Capex: ~ USD 8 Mn
- NPV: USD 61 Mn¹
- Estimated IRR: 11.8%
- Job Creation: 861
- Payback period: 6 years

VALUE PROPOSITION

- Total Global market (2019): USD 56 Bn growing at 5%; potential to export to growing markets
- KSA market for Motors is mainly served by imports reaching more than 90% of the market
- Saudi market is served predominantly by high cost OECD Countries, making it a good case for localization

KEY DEMAND DRIVERS

- Industrial machinery (38%) and power generation (21%) are the core sectors using motors; pumps (16%) and fans (8%) form the 2 largest applications of motors as a sub-component
- Electric vehicle projects are a key opportunity and driver to manufacture electric motors
- Unutilized capacity exist in the Kingdom and import tariff may support increasing utilization of current manufacturers

MARKET OVERVIEW

RAW MATERIALS - COMPONENTS

- **Commutator:** Metal ring divided into 2 halves; periodically reverses the current between the rotor and the external circuit or the battery
- **Bearing:** Support the rotor and allow it to turn on its axis with less friction
- **Winding:** Wires laid in coils, wrapped around an iron magnetic core so as to form magnetic poles when energized with current
- **Stator:** Core stationary component, consisting of windings; its materials and assembly of cast components capabilities determine the performance and efficiency of the motor

GLOBAL TRENDS

- Movement towards energy efficient motors with motor systems responsible for half of global electricity consumption
- Strong sales will arise in the production of motors for hybrid and electric vehicles
- Increased R&D to develop quieter, efficient, economical and powerful motors

1. Including terminal value with growth rate of 3% and WACC of 10%



Machinery and Equipment

Electric Motors

Public / متاح

Matured Product¹

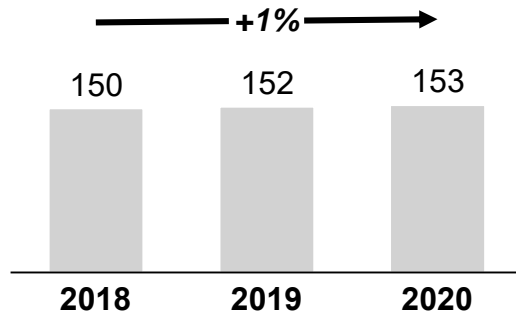
SUPPLY

SCALABILITY AND LOCALIZATION

Grade: Low Medium High

- Raw materials / components availability: Most raw materials are available in KSA. Limited casting / forging capabilities exist
- Key components like Winding, Stator and Rotor are available

KSA Import value (USD Mn)²

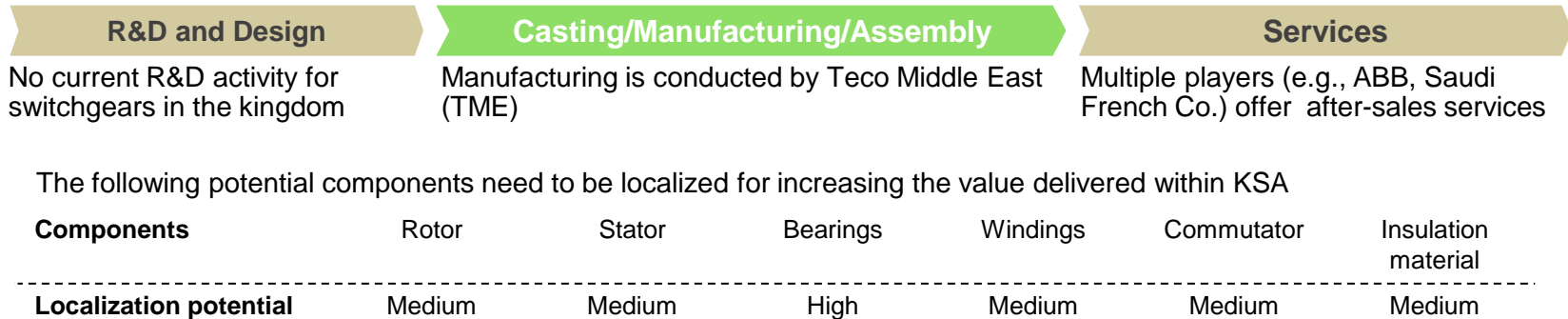


ENABLING FACTORS

ENABLERS & INCENTIVES

- Duty exemptions on imported raw materials/ components.
- Reduction/Subsidies on administrative costs (CR, visas, expat levy)
- Provide demand visibility by aggregating forecasted demand from National Champions

VALUE CHAIN



COST OF DOING BUSINESS IN KSA

Factor	Ranking amongst regional peers
Electricity tariffs for industrial players	\$48 /MWh
Productivity adjusted wages	\$3.3 /hour
Logistics Performance Index (1-5)	3.2
Customs Clearance Index (1-5)	2.7
Ease of getting credit (0-100)	50

KEY STAKEHOLDERS



1. Matured product is chosen from one of the four opportunity life cycle stages of this M&E product [4 lifecycle stages are: Introductory; Growth; Matured; Decline]

2. Most of the current local players for electric motors in KSA are operating in the repairs service business.

Source: Team analysis

Bottom 25% | Top 75% | Top 50% | Top 25%

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	Global trends	Latest business developments within the sector/product category
7	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
8	Import dependency	An overview of the countries from which Saudi Arabia is importing the product and their value/volume and share in total imports
9	Value chain analysis	The process or activities that would potentially need to be carried out to deliver the underlying product or service
10	Key stakeholders	Government institutions, organizations, and/or authorities that participate or influence the market for the underlying product/service
11	Enablers	Factors that enable investment in the underlying opportunity
12	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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