

## **Machinery & Equipment** Sensors and Transmitters

**OPPORTUNITY DESCRIPTION:** Widening consumer base across process, hybrids, and discrete industries calls for local manufacturing and assembly to meet growing demand

#### DEMAND



## INVESTMENT HIGHLIGHTS

- In the absence of local manufacturing/ assembly capabilities, PAS OEMs rely on their global supply chain sensors & transmitters in KSA
- Expected Investment Size#: USD 35 to 45 Mn
- Job Creation\*\*: 300 to 350

#This opportunity is for a component that is manufactured with a range of other components in a facility. No facility is expected to be constructed for manufacturing this component exclusively. Hence, the insights on capacity and investment are indicative - these would vary based on the decision an investor takes on the mix of components to manufacture

### VALUE PROPOSITION

- Local commitment KSA is supporting a digitally-enabled industrial revolution for projects in mining, industry, logistics, and energy through a \$453Bn fund; Vision to increase technical infrastructure readiness in industrial cities from 50% to 100% by 2025; A financing program of ~USD 800Mn to convert 100 factories in phase 1 for industry 4.0 transformation5
- Infrastructure Special economic zones, Industrial townships and technically oriented academic institutions provide world class infrastructure and competitive access to utilities and human capital

#### **KEY DEMAND DRIVERS**

- Expansion and investments across the oil & gas, petrochemicals, power and water sector will be the key demand drivers for process automation components such as sensors and transmitters
- Proposed increase in crude oil output, refining capacity and gas output to 238bcm by 20302, a 3% CAGR increase in chemical output<sup>3</sup> and increased power generation capacity by an estimated ~35 to 45GW will entail robust demand for process automation, sensors and transmitters4

#### MARKET OVERVIEW

## Stainless Steel for casing & process connections

Copper Clad Laminate

**RAW MATERIALS** 

- Bare PCB made of fiber glass epoxy resin or paper reinforced phenolic resin
- Chemicals for Etching (Ferric Chloride, Cupric Chloride, Alkaline Ammonia, Sulfuric Acid Hydrogen Peroxide)
- Plastics & Polymers

#### **GLOBAL TRENDS**

- There is a widening consumer base across industries (process, hybrids, discrete) and even beyond, into healthcare, retail and smart city segments
- Due to an increased need to reduce costs by optimizing operations and processes, factories and manufacturers are increasing their spending on technology and digital solutions - this trend has accelerated post COVID-19

Source: <sup>1</sup> Team Analysis of published strategy documents, reports from SWCC & IKTVA publication, independent market reports, UN Comtrade data, General Authority of Statistics data and industry interactions; <sup>2</sup>UN Comtrade; <sup>3</sup>Gulf Petrochemicals Association Reports (GPCA): 4SWPC Announcement, #Expert interviews (assumptions), financial statements of peer companies, team analysis



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#### SCALABILITY AND LOCALIZATION

Grade:

Low





- Localization can be enhanced by establishing new research and development and manufacturing facilities aimed at meeting local and regional demand.
- Existing local manufacturers can increase their capacity to meet local demand, while focusing on strategic partnering to drive new solutions/ demand
- Manufacturing must be focused on growth potential of applications for different types of sensors and transmitters and must have adequate capacity to meet demand and scale up accordingly.

#### IMPORT DEPENDENCY

- 90% of sensors and 70% of transmitters are imported from Asia-Pacific, Europe, and Americas<sup>6</sup>
- Although major automation companies have a local presence through assembly in Saudi Arabia, they do not manufacture sensors and transmitters locally

#### **ENABLING FACTORS**

#### **ENABLERS & INCENTIVES**

- Customs duties exemption on imported machinery, equipment, raw materials and spare parts utilized for industrial purpose
- Access to local content initiatives and programs at demand centers
- HRDF covers monthly salaries of up to 30% for Saudi employees (extra 10% for females) for 2 years
- Expat worker levy waived off for industrial manufacturers
- Tax rebates on exports, raw material imports, and 50% tax credit on Saudi national worker's payroll & training costs for 10 years
- 2-year grace period for the repayment of loans
- Unprecedented access to a diversified value chain especially raw materials (steel, aluminum, polymers, and industrial minerals)

Bottom

25%

Top

75%

Top

50%

#### **VALUE CHAIN**

#### Upstream

- PCB assembly
- Sensor element manufacturing
- Machining to manufacture casing, process connections etc.

#### **Midstream**

- Sensor Welding
- Injection Molding For **Plastic Components**
- PCB Installation
- **Contacting Process**
- 5. Autofrettaging
- Case Mounting & Welding

#### **Downstream**

- Final Assembly
- Laser Labelling
- Testing
- **Packaging**
- After sales servicing

#### Applications\*

- Power
- Oil & gas
- Petrochemicals & Chemicals

#### **COST OF DOING BUSINESS IN KSA** Ranking amongst regional peers **Factor** \$48 Electricity tariffs for industrial players /MWh \$3.3 Productivity adjusted wages /hour Logistics Performance 3.2 Index (1-5) Customs clearance 2.7 index (1-5) Ease of getting credit 50 (0-100)

Top

#### KEY STAKEHOLDERS



وزارة الاستثمار Ministry of Investment











# **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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