

# PRESSURE EXCHANGERS

## INVESTMENT OPPORTUNITY SCORECARD

### ENERGY & WATER

OCTOBER 2020



# ENERGY & WATER PRESSURE EXCHANGERS

Public / متاح

High Potential

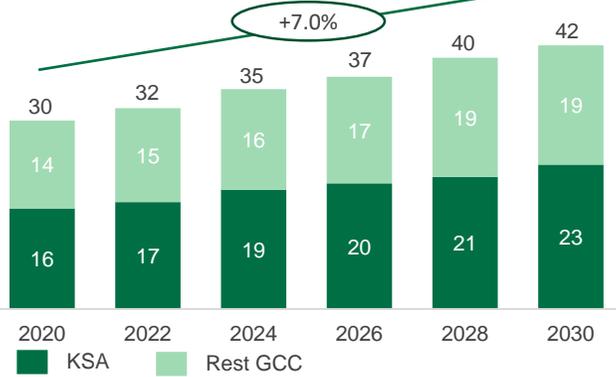
Moderate Potential

Low Potential

**OPPORTUNITY'S DESCRIPTION:** Setting up a manufacturing and assembly plant for the production of Pressure Exchangers in KSA.

## DEMAND

### MARKET SIZE, USD MN



## INVESTMENT HIGHLIGHTS

- Investment size of USD 16-21 Mn
- Investment model: JV or 100% private investment
- This opportunity is expected to create 60-100 jobs
- Expected IRR: More than 8%

## INVESTMENT OVERVIEW

### VALUE PROPOSITION

- KSA's geographical advantage, trade agreements with other Arab countries and trade regulations on industrial goods make exports to neighboring countries favorable
- Large potential customers in KSA and GCC for Pressure Exchanger– Acwa Power, SWCC, Marafiq, EWEC, Barka Desalination Co. and Dubai Electricity & Water Authority
- KSA offers low and competitive prices in the industrial cities for land & construction costs, wages, power and diesel

## KEY DEMAND DRIVERS

- 25+ new RO-based plants are planned in KSA by 2030 transitioning away from MSF1 based technology
- A capacity of 5.5 million m3 daily water desalination is coming online by the year 2025 to cover the water demand shortfall
- Increased desalinated water demand due to vision 2030 initiatives and mega projects and growth in residential, commercial and industrial sectors in KSA
- Cost reduction by up to 60% and improved efficiency provided by pressure exchangers are keys to cost-effective desalination

## MARKET OVERVIEW

### MARKET READINESS AND COMPETITOR ANALYSIS

- Global pressure exchangers manufacturers' presence in the GCC is limited to sales offices

### COMPETITOR ANALYSIS

- Energy Recovery, Flowserve, Fluence and FEDCO are the key global players providing Pressure Exchangers



### GLOBAL TRENDS

- Pressure exchangers are used in Reverse osmosis (RO) desalination processes
- Population growth and water scarcity are expected to continue increasing the demand for water desalination globally
- Growing awareness on potable water and its demand in emerging markets
- Adoption of stringier regulations and standards for clean water



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## SUPPLY

### SCALABILITY AND LOCALIZATION

Grade: Low Medium High

- There are multiple local manufacturers providing components and raw materials including Alumina (Ceramics), Fibreglass Reinforced Plastic (FRP), Titanium and Plastic seals – Maaden, Encore, Tasnee, John Crane and others

### IMPORT DEPENDENCY

- 100% of Pressure Exchangers are imported into KSA

Country	% of Saudi imports
Italy	16.9%
South Korea	16.6%
United states	12.7%
France	11.6%
Others	42.2%

### VALUE CHAIN ANALYSIS

○ Low ● High



Localization potential



Current localization level

Some raw materials are being produced locally, e.g., Alumina

Manufacturers of different components exists; specifications potentially not tailored for pressure exchanger requirements

Not localized - currently done by OEMs abroad

Currently being done by EPC / OEM; OEMs have limited local presence

### KEY STAKEHOLDERS

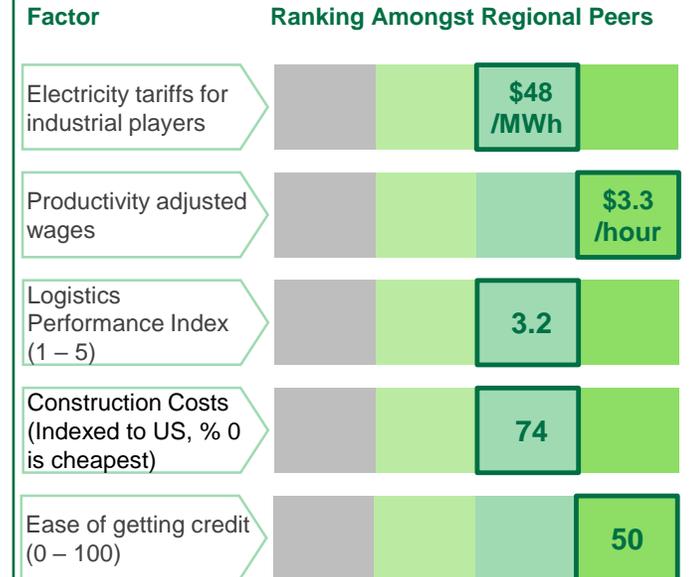


## ENABLING FACTORS

### ENABLERS

- Custom duty drawback & exemption
- Up to 75% of project financing through soft loan by SIDF
- Land for lease starting from \$ 0.26 per sqm
- HRDF covers monthly salaries for 30-50% of Saudi employees (extra 10% for females) for 2 years, provided it does not exceed USD 4,000
- 100% foreign direct ownership allowed

### COST OF DOING BUSINESS IN KSA



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

# DEFINITIONS

#	SCORECARD SECTION	DEFINITIONS
1	<b>Market size</b>	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	<b>Demand drivers</b>	A select number of factors that will influence future demand for the related product/service
3	<b>Investment highlights</b>	An overview of key financial metrics summarizing the investment opportunity along with the expected return based on the suggested investment size
4	<b>Value proposition</b>	Summary of key differentiators that position KSA as a strategic choice over other regional/global peers
5	<b>Market readiness</b>	An overview of KSA market structure, market maturity and level of participation by local and global players
6	<b>Competitor analysis</b>	List of the local & international players manufacturing the underlying product in Saudi Arabia and their market share
7	<b>Global trends</b>	Latest business developments within the sector/product category
8	<b>Scalability and localization</b>	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	<b>Import dependency</b>	An overview of the countries from which Saudi Arabia is importing the product and their value/volume and share in total imports
10	<b>Value chain analysis</b>	The process or activities that would potentially need to be carried out to deliver the underlying product or service
11	<b>Key stakeholders</b>	Government institutions, organizations, and/or authorities that participate or influence the market for the underlying product/service
12	<b>Enablers</b>	Factors that enable investment in the underlying opportunity
13	<b>Cost of doing business in KSA</b>	Key factors that position KSA as a competitive destination for investment in the region

**CONNECT WITH US FOR MORE DETAILS:**

[Energy&Water@misa.gov.sa](mailto:Energy&Water@misa.gov.sa)

investsaudi.sa



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