

POLYVINYLIDENEFLUORIDE (PVDF)

INVESTMENT OPPORTUNITY SCORECARD

CHEMICALS

MARCH 2021

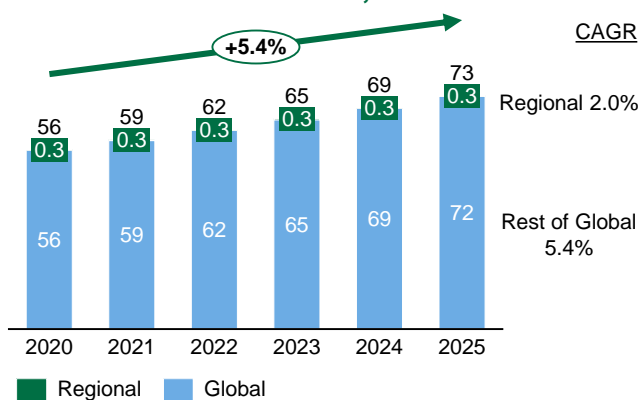


POLYVINYLIDENEFLUORIDE (PVDF)

OPPORTUNITY DESCRIPTION: Opportunity to setup Polyvinylidene fluoride (PVDF) manufacturing plant of 5 KMT capacity in KSA to cater regional and global demand

DEMAND

MARKET SIZE, KMT



INVESTMENT OVERVIEW

INVESTMENT HIGHLIGHTS

- Expected investment size of USD 212 Mn
- Plant capacity: 5 KMT
- Investment model options: pure private sector model or joint venture with local player

VALUE PROPOSITION

- KSA is one of the largest chemical producers in the world and contributes ~10% to the global output
- KSA has a strategic location and access to feedstock enabling it to serve emerging markets like India, Africa and South East Asia
- KSA can leverage favorable trade agreements (eg: GAFTA) and strong logistics infrastructure to enhance export capability
- Opportunity for first mover advantage due to non-existent local production of PVDF and lack of competition from major global manufacturers
- This opportunity has a strategic alignment with vision 2030 and National Industrial Strategy by supporting many industries such as defense, automotive and aerospace

KEY DEMAND DRIVERS

- Demand for PVDF is driven by its increasing applications in rapidly growing industries such as automotive, defense and aerospace, medical and construction
- Large-scale planned/ongoing investments in automobile sector especially in manufacturing segment will further fuel demand for PVDF in the Kingdom
- Under Vision 2030 strategy, the Kingdom is seeking to significantly expand its domestic industrial base for defense and aerospace sectors and localize over 50% of its military equipment spending by 2030

MARKET OVERVIEW

GLOBAL TRENDS

- Polyvinylidene fluoride (PVDF) market is estimated to reach at USD 1.2 Bn by 2025, growing at a CAGR of 6.7% between 2020 – 25
- PVDF is a highly non-reactive thermoplastic fluoropolymer that is synthesized by the polymerization of vinylidene difluoride. It possesses properties such as excellent chemical resistance, abrasion resistance, UV (Ultraviolet) stability, tensile strength, and wear resistance
- In 2020, Asia-Pacific dominated the global PVDF market with majority consumption coming from China, ASEAN (Association of Southeast Asian Nations) Countries, and Japan, among others
- Global PVDF market is consolidated, and the top four players accounted for a market share of over 90% of the global market. Key players in the PVDF market include Arkema Group, Solvay, Kureha Corporation, and Dyneon LLC (3M Company), among others



POLYVINYLIDENEFLUORIDE (PVDF)

SUPPLY

SCALABILITY AND LOCALIZATION

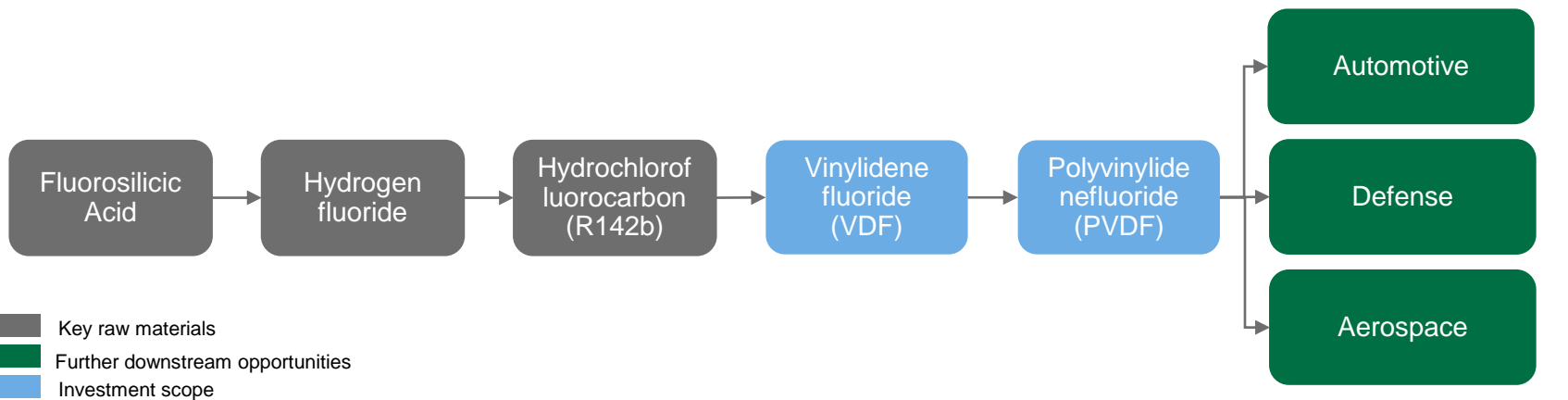
Grade: Low Medium High

- KSA's strategic advantage over regional peers in cost of establishing business especially in manufacturing domain
- Potential to serve local and regional market and create a 'regional hub' for chemicals manufacturing in KSA
- Opportunity to utilize low-cost energy in KSA

IMPORT DEPENDENCY

- No local production of PVDF exists in Saudi Arabia; currently 100% of the local demand met by imports

VALUE CHAIN ANALYSIS



KEY STAKEHOLDERS



ENABLING FACTORS

ENABLERS

- Up to 75% of project financing by Saudi Industrial Development Fund (SIDF)
- 2-year grace period for the repayment of loans
- Expat worker levy waived-off for industrial manufacturers until October 2024
- HRDF covers 30-50% of Saudi employees' monthly salaries (additional 10% for females) for 2 years, provided that it does not exceed USD 4,000

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

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	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

DISCLAIMER

- This report must be used only to access information, and the information must not be construed, under any circumstances, explicitly or implicitly, as an offer to sell or a solicitation to buy or sell or trade in any opportunity herein mentioned.
- Ministry of Investment (MISA) has no undertaking to update these materials after the date, with the understanding that such information may become outdated or inaccurate.
- Mentioned information in this report is obtained from reliable sources but its accuracy and reliability are in no way guaranteed. No guarantee of any kind is tacit or explicit when projections of future conditions are attempted. MISA has used public/or confidential data and assumptions and has not independently verified the data and assumptions used in the analyses. Changes in underlying data or operating assumptions will clearly impact the analyses and conclusions.
- The financial evaluations, projected market and financial information, and conclusions contained in these materials are based upon standard methodologies, are not definitive projections, and are not guaranteed by MISA
- The content of this report must not be construed as an implied promise or guarantee for profit or limited loss express or implied by or from MISA or any of its officers, directors, employees and affiliates. All mentioned investments in this report are subject to risk, which should be considered prior to making any investment decisions
- MISA shall have no liability whatsoever to any third party, and hereby any third party waives any rights and claims it may have at any time against MISA with regard to this report, any services or other materials, including the accuracy or completeness thereof.

CONNECT WITH US FOR MORE DETAILS:

Petrochemicals@misa.gov.sa

investsaudi.sa



@investsaudi

