

**OPPORTUNITY DESCRIPTION:** To set up a manufacturing facility to produce solar inverters with a capacity of 3GW per anum to serve the local and regional demand.

#### **DEMAND**



#### **INVESTMENT HIGHLIGHTS**

- Expected Investment size of USD 364 M
- Plant capacity: 3 GW
- Expected IRR: 12% (with available incentives)
- Payback period: 5-6 Years
- Job Creation: 2,849
- GDP Impact %: 0.63% by 2037
- Location (Region): TBD

#### NVESTMENT OVERVIEW

#### **VALUE PROPOSITION**

- Solar inverters are a critical component in solar power plants and constitute a vulnerability and business continuity risk.
- The Kingdom has the capabilities and relevant industries that support the localization of inverters.

#### **KEY DEMAND DRIVERS**

- Kingdom commitments to achieve energy mix with 50% sourced from renewables by 2030.
- KSA's ambitious target to achieve 75% localization of all energy sectors by 2030.
- KSA regulations for small scale and self consumption of renewable energy.

#### **GLOBAL TRENDS**

- Solar project capacity in 2021 reached 167.8 GW1
- Demand projections are expected to grow at an annual YoY 10% to reach more than 450 GW by 20302
- Decarbonization and net zero neutrality targets
- The EU accelerated development plan of solar energy projects.

### MARKET OVERVIEW

- RAW MATERIALS

  PCB's and circuit breakers
- Transformers
- Power cords
- Distribution board
- Structural frames and panels

Note: 30-45% of the materials can be sourced locally<sup>3</sup>.

Source: (1) SolarPower Europe 2022, (2) IHS Markit, Q3 2022. (3) MoEnergy's local industry analysis.



### متاح / Public



# **ENABLING**

### SUPPLY

#### SCALABILITY AND LOCALIZATION

Grade:







- An estimated annual demand of 4-6 GW a year offers an opportunity to scaling up and vertically integrating the supply chain.
- The project will source electrical components like transformers, metal enclosures and wiring from the local market. However, other components will be imported as the local supply chain is being developed.

#### IMPORT DEPENDENCY

Currently 100% of the inverters are imported.

#### **ENABLERS & INCENTIVES**

The investment opportunity is assumed to consider the publicly available incentives

- SIDF financing up to 75%
- HRDF (3,000 SAR/Employee)
- Worker Salary support (3000/month)
- custom duty exemptions on raw material

#### **VALUE CHAIN**

#### **Upstream**

#### Completely knockdown

**Processors** Resistors Capacitors Inductors Silicon carbide

Distribution board Encapsulants Magnetic filters Power cords **MPPT** 

Semi knockdown

#### **Downstream**

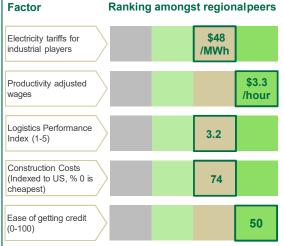
#### **Assembly**

Electrical components Structural parts Wiring

### **Applications**

Solar PV projects

## **COST OF DOING BUSINESS IN KSA**



Bottom

Top 75%

Top 50%

3











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# **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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