

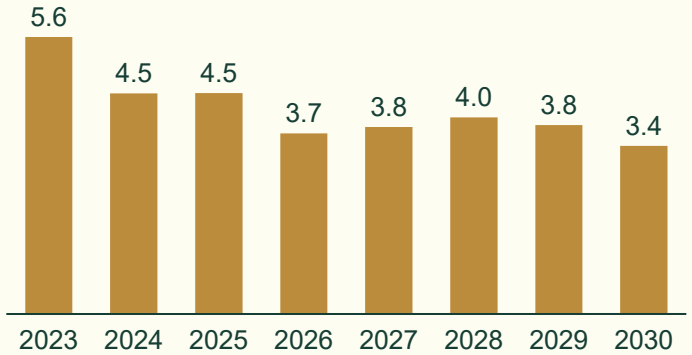
# EHV Transformer

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# EHV Transformer – Opportunity Card (1/2)

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## KSA Demand in Billion USD / year<sub>1</sub>



\* There is currently no local production capacity for EHV transformer

## Investment Highlights

- Expected Investment: **~\$35 Mn**
- Plant Capacity: **~20 units / year**
- Expected Project IRR: **~17.8%**
- Expected Equity IRR: **~23%**
- Payback period: **~8 years**
- Expected GDP Impact till 2030: **~\$117 Mn**

## Major Assumption

EHV Transformer Price	<b>~\$4 Mn/ unit</b>
Debt	<b>70%</b>
Interest Rate	<b>7%</b>

## Raw Materials

- Iron
- Copper
- Steel
- Paper
- Mineral Oil

## Energy Sector Demand Drivers

- Upcoming / expanding conventional energy giga projects are the major energy sector demand driver for EHV Transformers like Shoaiba II, Rabigh 2 Power Plant, Riyadh Power Plant No. 10 and RAWEC, etc
- KSA has massive plans to increase transmission capacity locally and service the double-fold regional demand growth beyond KSA

## Other Sectors Demand Drivers

- Rampant construction under the Saudi Vision 2030 drives the demand for conventional energy and thus EHV Transformers like NEOM, Momrah Grant Plans and other housing projects

## Value Proposition

- The government in Saudi Arabia offers support and incentives to encourage local investment provided by entities in the Saudi Arabian government and the private sector
- KSA imports 100% of High-Power Transformers (above 100MVA), therefore opportunities exist to localize power transformers production
- Easy access to regional markets

## EHV Transformer – Opportunity Card (2/2)

### Import Dependency

- In 2020, Saudi Arabia imported **\$94.2M** in **Liquid dielectric transformers > 10,000 KVA**, becoming the **12th** largest importer of **Liquid dielectric transformers > 10,000 KVA** in the world<sup>1</sup>
- Saudi Arabia imports Liquid dielectric transformers > 10,000 KVA primarily from: **South Korea (\$37.6M)**, **Turkey (\$33M)**, **China (\$7.27M)**, **Italy (\$7.15M)**, and **Germany (\$4.8M)**<sup>1</sup>

### Localization Potential

Baseline	Target	Contribution*
<b>0%</b>	<b>75%</b>	<b>2.8%</b>

### Scalability

- The business can expand its geographic reach by targeting new markets in the middle east region.
- The business can expand its product line to offer a wider range of transformers

### Enablers and Incentives

No enablers are taken into consideration in the financial estimation for this opportunity, but the opportunity is subject to off the shelf's incentives like:

- **SIDF financing up to 75% of CAPEX**
- **HRDF covers monthly salaries of up to 3,000 SAR / employee for Saudi employees**
- **Tax credits for R&D for manufacturers**
- **Custom duty exemption for import of capital goods/machinery** required for setup of facility

### Major Local and International Manufacturers

- Local Manufacturers: N/A
- International Manufacturers: Hyundai Electric, Hysung, BEST, TEBEA and Siemens Energy

### Key Stakeholders



### Value Chain

