



Wired for Growth: Examining the Middle East's Switchgear Sector

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- The Middle East (ME) market for Medium Voltage switchgear is projected to undergo robust and consistent annual growth from 2023 to 2028.
- Economic recovery from the COVID-19 pandemic has resulted in higher investments in infrastructure, transport electrification, renewable power generation, and industrial projects. These investments necessitate reliable electrical networks, driving the demand for switchgear.
- Additionally, buyers are actively replenishing their inventories to address backlog challenges caused by the pandemic.

The Middle East Switchgear Market is poised for robust growth between 2023 and 2028, focusing on both Medium Voltage (MV) and High Voltage (HV) segments. This growth is fueled by various factors, including increased demand from utility, power generation, and industrial sectors, as well as the region's growing need for electricity, large infrastructure projects, the rise of electric vehicles (EVs), and investments in renewable energy. According to PTR, Medium Voltage (MV) refers to voltages ranging from 1 to 42kV, while High Voltage (HV) includes voltages exceeding 42kV.

Middle East Switchgear Market Outlook

MV Switchgear

PTR anticipates a 10% Compound Annual Growth Rate (CAGR) in revenue for Medium Voltage (MV) switchgear demand over the specified period. Within the region, Saudi Arabia is poised to spearhead the MV switchgear market, commanding a 65% share, while the United Arab Emirates (UAE), the second-largest market, is expected to capture a 20% share of regional revenue demand. In the Middle East (ME) region at the MV level, the distribution of insulation options is projected to be evenly split, with MV Air-insulated switchgear (AIS) accounting for 60% and MV gas-insulated switchgear (GIS) holding a 40% share by 2024. The utility sector is forecasted to dominate MV switchgear demand, claiming a 65% share in 2024, followed by the industry and power generation sectors with a 35% combined share. However, the renewable energy sector is poised for notable growth, with an impressive CAGR of nearly 15% in revenue from 2023 to 2028, surpassing growth rates in other verticals. Demand for GIS is expected to be highest within the industry vertical, particularly in the oil and gas, petrochemical, and water treatment sectors.

HV Switchgear

According to PTR, the High Voltage (HV) switchgear market is expected to experience a robust 7% Compound Annual Growth Rate (CAGR) in revenue from 2023 to 2028. Saudi Arabia is forecasted to emerge as the leading market for HV switchgear within the region, with the UAE following closely behind. The utility sector is anticipated to command the largest market share in HV switchgear demand, primarily fueled by extensive expansion projects in high-voltage transmission grids across the region. At the HV level, Gas-insulated Switchgear (GIS) is expected to maintain its preference due to its suitability for challenging environmental conditions.

The following figures illustrate a revenue comparison and AIS/GIS market share for HV and MV switchgear.

ME Switchgear Annual Market

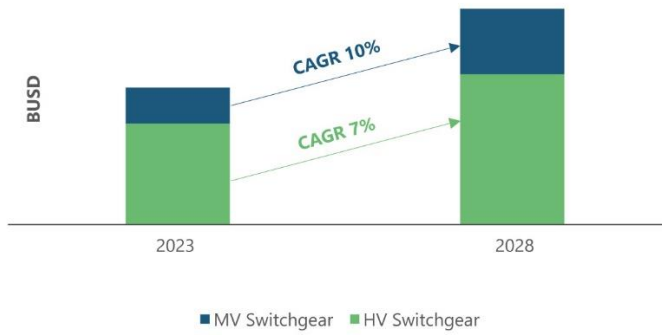


Figure 1: Middle East MV and HV Switchgear Annual Market in Terms of Revenue.

Source: PTR Inc.

ME Switchgear Annual Market

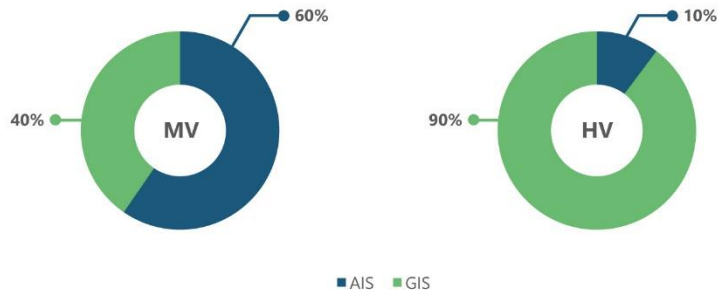


Figure 2: Middle East MV and HV Switchgear AIS/GIS Market Share in Terms of Revenue.

Source: PTR Inc.

Middle East Switchgear Market Dynamics

The switchgear market in the region has strong demand from all three verticals i.e. utility, power generation, and industry due to Investments in infrastructure development, grid extension, and industrial expansion.

Due to these developments, PTR expects that electricity demand will increase by 3.3% annually until 2030, translating to a minimum of 70 GW of additional peak demand. To meet this surge, initial estimates indicate a need to significantly increase the power generation capacity by 25-30%.

Infrastructure Projects

The development of mega infrastructure projects is driven by increasing urbanization and efforts to diversify the region's economy away from oil and gas towards sectors such as tourism, trade, and technology.

Some key infrastructure projects include:

- Neom City in Saudi Arabia, a mega-project covering an area of 26,500 km² with a planned investment of USD 500 billion, expected to be completed by the end of 2039.
- King Abdullah Economic City (KSA), with a USD 59 billion investment, expected to be completed by the end of 2034.
- Mohammed Bin Rashid Real Estate Development Project in the UAE, worth USD 28 billion and expected to be finished by the end of 2035.

Growth of EVs

EV infrastructure in the Middle East is projected to expand significantly over the next decade, with initial research by PTR suggesting a growth factor of 15. The increased electrification of transportation is anticipated to elevate grid load, thereby requiring additional energy supply.

Renewable Energy Investments

The power generation capacity mix in the Middle East (ME) is typically characterized by high fossil fuel and low renewable installed capacity. However, as ME countries embark on diversifying and decarbonizing their economies, a noticeable trend is emerging in the power generation sector. Leveraging abundant solar irradiance, solar PV installed capacity is expected to become the primary focus of investments in this sector.

Some key projects include:

- Saudi Arabia aims to annually add 20 gigawatts (GW) of renewable energy to reach 130 GW by 2030, as stated by Minister of Energy, Prince Abdulaziz bin Salman.
- The United Arab Emirates (UAE) is on track to generate a total clean energy capacity of 19.8 gigawatts by 2030, according to Suhail bin Mohamed Al Mazrouei, the Minister of Energy and Infrastructure.

Way Forward

The prospective trajectory of the Middle East switchgear market, encompassing both Medium Voltage (MV) and High Voltage (HV) sectors, is being shaped by strategic investments in pivotal areas, rendering it an attractive arena for switchgear manufacturers.

PTR recommends that original equipment manufacturers (OEMs) closely examine localization regulations, particularly in Saudi Arabia, and tailor their business strategies accordingly. Recognizing a growing trend, PTR acknowledges that foreign manufacturers can now train and certify local partners to utilize their components, facilitating the production of local solutions within the Middle East.

Furthermore, the European Union's F-gas regulations are poised to significantly impact SF6-based Gas-insulated Switchgear (GIS), prompting PTR to advise all stakeholders to perceive this as a substantial industry shift and allocate resources to comprehend and adapt to it effectively.

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