GCC HV Switchgear Market : Enough Spare Capacity Despite Facilities Shutdown

by Aleezeh Shahid, *Research Analyst at Power Technology Research*

- As of 2020, the HV switchgear market of GCC countries accounts for 5% of the global HV switchgear market in terms of revenue.
- In GCC's HV switchgear market, Saudi Arabia holds the largest market share which accounted for 40% of the region's total revenue in 2020.
- International suppliers are closing down their manufacturing facilities outside GCC to cut down on customs, overhead, and G&A costs.

The HV switchgear market of GCC countries accounts for 5% of the global HV switchgear market in terms of revenue as of 2020 with Saudi Arabia leading the market in this region. Saudi Arabia is followed by UAE, Qatar, Kuwait, Oman and Bahrain, in order of greatest market shares. Other than Saudi Arabia and the UAE, however, the other GCC countries have fairly small shares in the GCC market as well as the global HV switchgear market.

Although the GCC HV switchgear market accounts for only 5% of the global HV switchgear market, it possesses immense potential and noteworthy opportunities for HV switchgear suppliers. Mega projects such as Vision 2030, Neom City, and the World Cup project will be generating demand in the GCC region especially once procurement starts which Power Technology Research expects to begin from 2023.

That said, it should be noted that COVID-19 did slow down the progress on these projects which consequently affected their timeline and the ensuing demand. Major reasons for the delays were the shrinking of the fiscal space of GCC countries followed by supply chain issues due to COVID-19 and its associated lockdowns.

Suppliers and facilities serving GCC's HV switchgear market include the Hitachi ABB Power Grids factory in Switzerland, General Electric's plant in France, Hyosung's plant in Korea, Siemens Energy in Germany, and Toshiba's factory in Japan. Almost all of the HV switchgear demand generating from the GCC is being met by imports with there being only one HV switchgear manufacturing facility in the region in Dammam, Saudi Arabia.

Suppliers of HV switchgear ranked as per their revenue share in the GCC market and in Saudi Arabia in particular are given in Figures 1 and 2, respectively, below.

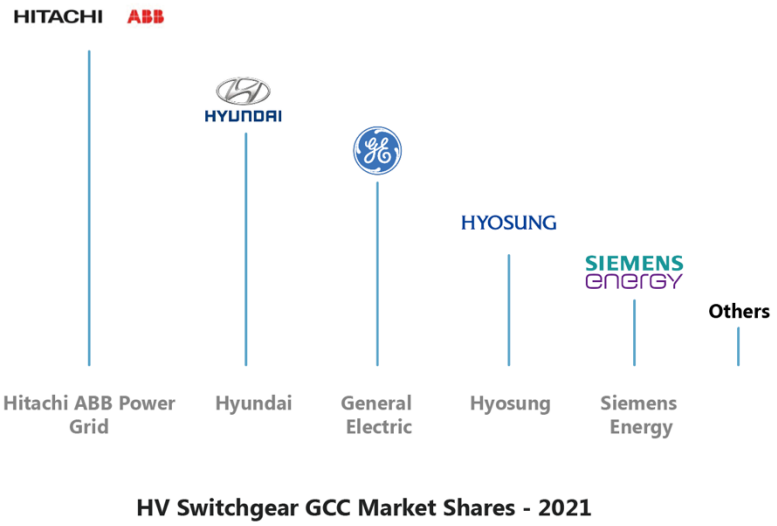

Figure 1: Ranking of suppliers in the GCC HV switchgear market according to their market shares in 2021.
Source: Power Technology Research

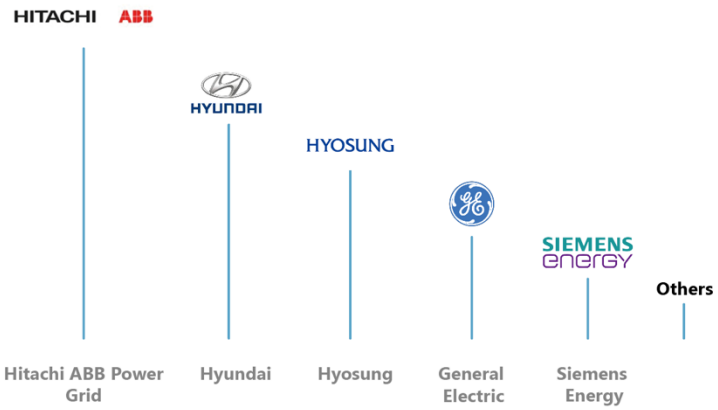

Figure 2: Ranking of suppliers in the Saudi Arabian HV switchgear market according to their market shares in 2021.

Source: Power technology Research

Overall, the market is moving towards consolidation where suppliers are shutting down facilities instead of an increase in competition with the introduction of new suppliers. Facility shutdown helps cut back on costs and encourages capacity utilization of the suppliers' already existing plants.

Saudi Arabia

In GCC's HV switchgear market, Saudi Arabia holds the largest market share, accounting for 40% of the total revenue in the region in 2020. Saudi Arabia is followed by the UAE, which accounts for 35% of the total revenue in this region, and then Qatar (9%), Oman (8%), Bahrain (4%), and Kuwait (4%). There were initially two switchgear manufacturing facilities in the region, both located in Saudi Arabia, until 2020 when ABB Power Grids divested to Hitachi.

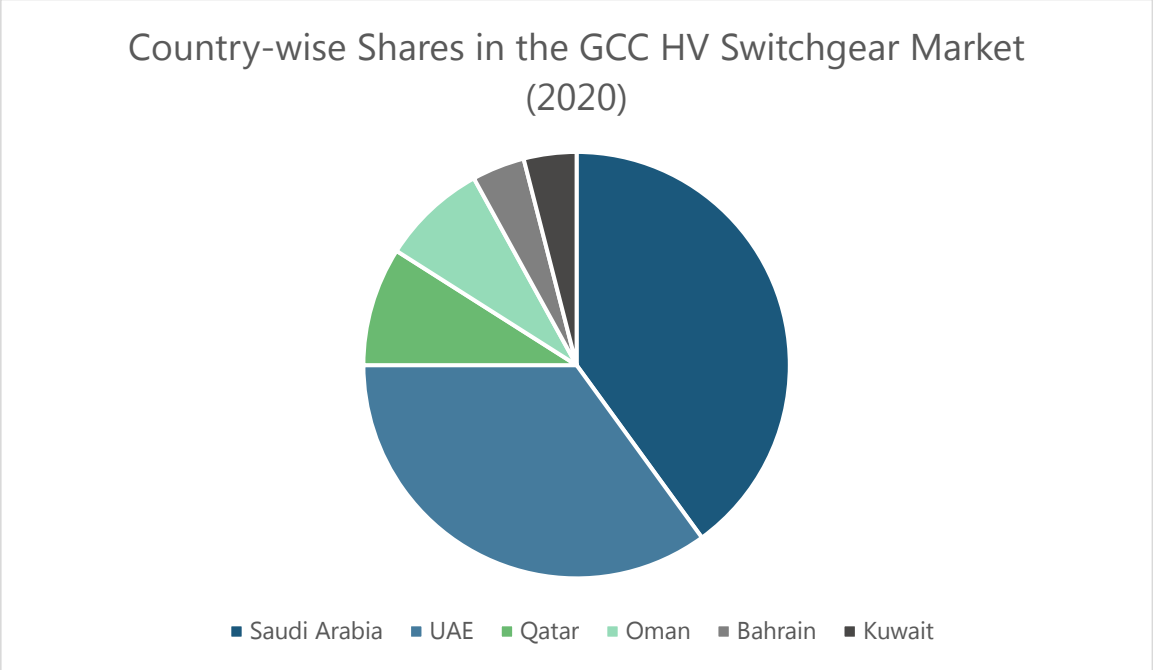

Figure 3: Share of GCC countries in the GCC HV switchgear market in 2020.

Source: Power Technology Research

Delving into segment specifics, in the 145 KV GIS category in Saudi Arabia, Hitachi ABB Power Grids is the leading market player followed by Hyosung. In the Saudi Arabia's 380 KV GIS category, Hyosung takes the lead followed by Hitachi ABB Power Grids. Over the last three years, General Electric fell out of competition due to it being expensive and not remaining a favorable choice in the GCC given other lower cost alternatives available in the market (see Figure 2).

Growth Drivers

Growth in the HV switchgear market of Saudi Arabia is expected to be driven by developments in the utility, generation, and industrial sector including O&G, petrochemical, and infrastructure.

Utility Sector

In Saudi Arabia's utility sector, an aggressive increase in the MVA capacity was observed from 2011-2016 followed by a slowdown in its growth. Under Vision 2030 which aims to diversify the economy, Saudi Arabia is constructing sustainable new cities which are expected to drive the growth of switchgears in the utilities sector.

Generation

In 2016, Saudi Arabia set a goal of producing 60 GW of renewable energy by 2030 under its Vision 2030 project but little renewable generation capacity was actually installed in the country. That year, according to Energy Information Administration (EIA) of the U.S., Solar PV constituted only 0.1% of the total generation installed capacity. Later, in 2021, the Kingdom reaffirmed its commitment to increasing the share of renewables in the country's generation mix to 50% by 2030. Given the long ways to go, this will require sizable investments in the renewable energy sector which in turn will drive demand for HV switchgear in Saudi Arabia.

Breaking down the timeline of renewable capacity installations in Saudi Arabia, we see that there has been inconsistent growth in this area since 2010. From 2010-2018, 34 MW of renewable capacity was installed whereas 325 MW was installed in 2019 alone. This was followed by no renewable capacity additions in 2020. Saudi Arabia's cumulative renewable installed capacity is around 410 MW including 360 MW of solar PV capacity and 50 MW of solar thermal capacity (see Figure 4).

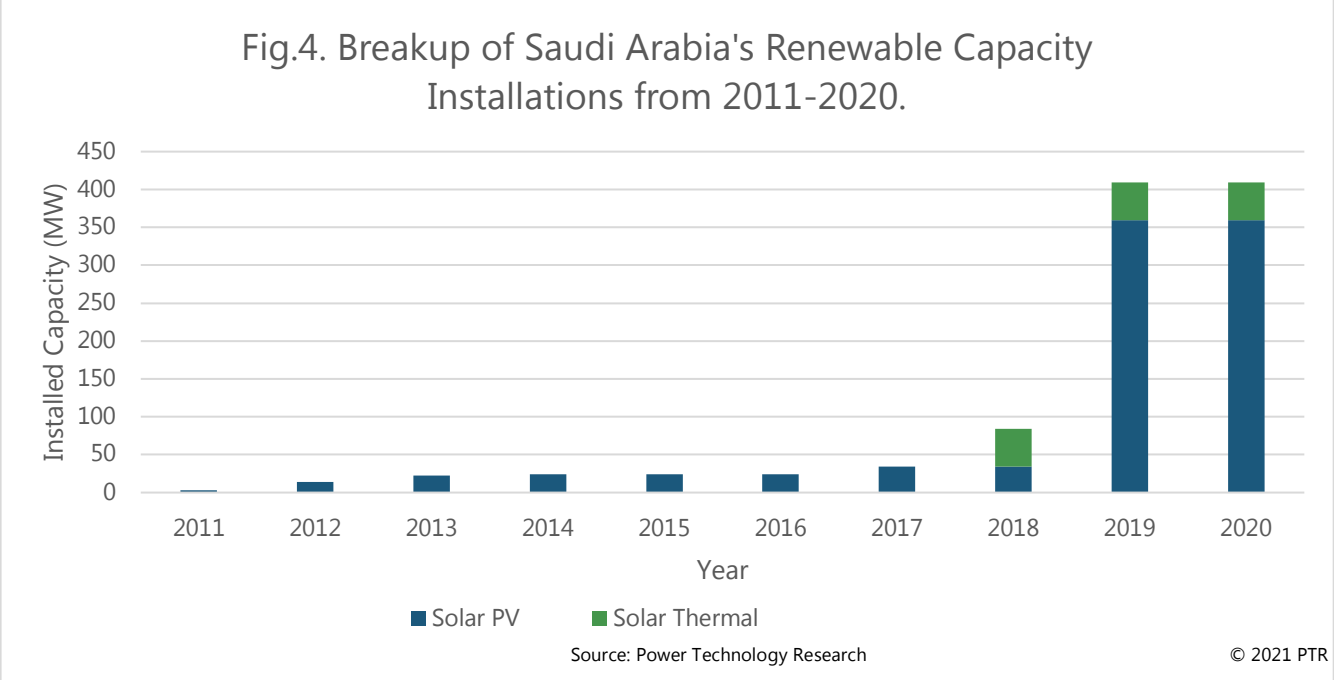

Figure 4: Breakup of Saudi Arabia's renewable capacity installations from 2011 to 2020.
Source: IRENA

Industry: O&G, Petrochemical, Infrastructure

The following projects, worth billions of US dollars, are expected to drive the demand for switchgears from the industry in the coming years in Saudi Arabia.

- Saudi Aramco is working on the Uthmaniyah and Shedgum gas plant expansions which are included in a USD 2.7 billion project. The contract involves work on three new gas compression plants in the Uthmaniyah and Shedgum areas followed by upgrades in the already installed Uthmaniyah and Shedgum gas plants and other facilities.
- Four main EPC packages which are a part of the South Ghawar Unconventional Gas Field Development project worth USD 2 billion were awarded to Saudi Aramco last year.
- The Aramco Hawiyah Unayzah Gas Reservoir Storage (HUGRS) project is located 260 km east of Riyadh. The project includes construction of a gas injection facility with booster and injection compressors, a gas reproduction facility with reproduction compressors and slug catchers, followed by several utilities and offsite facilities. The project is expected to be completed in 2023 and will enhance Saudi Aramco's ability to manage the gas volumes needed to meet seasonal domestic demands.

Looking Ahead

Saudization and localization requirements are indeed impacting the switchgear market of the GCC region but their impact on the HV switchgear market is not to the extent it could have been due to the fact that most of the HV switchgear demand in the region is met by imports. Furthermore, as there is sufficient spare production capacity available across several facilities, international suppliers are closing down some of their manufacturing facilities to cut down on customs, overhead, and G&A costs. To reduce custom costs, suppliers are also supplying to the GCC, and Saudi Arabia specifically, through countries with lenient custom tax regimes.

Companies are shifting their focus towards distributed generation which is in turn leading them away from the "traditional grid" design. Due to this, HV switchgear is no longer seen as the lucrative business it once was as new technologies have started being incorporated into MV switchgear instead. Two tier-1 companies have in fact divested or spun off their HV businesses as a result as well. Siemens spun off its HV business as a new entity called Siemens Energy and, similarly, ABB divested its Power Grids business to Hitachi as well.

Contact:

Hassan Zaheer - Exec. Director Client Relations & Advisory

+49-89-12250950

(hassan.zaheer@powertechresearch.com)