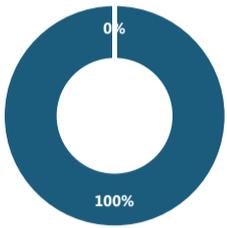


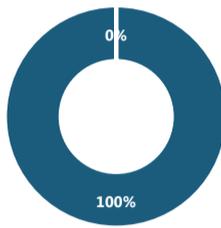
Static VAR Compensator (SVC) is a conventional FACTS technology and has been a part of power grids across the globe for many decades. Advancement in power electronics switches and better control mechanisms have brought Static Synchronous Compensator (STATCOM) to life. This offers better control, is faster in response, and has a smaller footprint as compared to an SVC.

Evolution of FACTS in South America

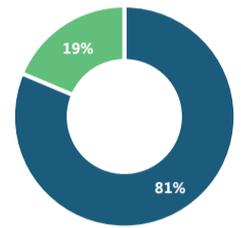
Technology Split Till 2000



Technology Split (2000-2010)



Technology Split (2011-2021)

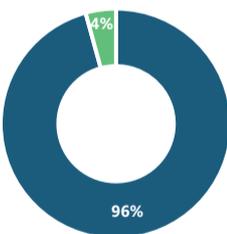


■ SVC ■ STATCOM

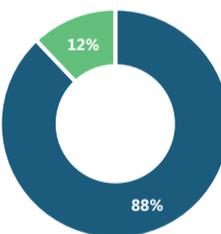
- Latin American electricity markets are governed and operated by laws and frameworks which were defined many years ago. Countries like Brazil, Argentina and now Chile as well, are recognized as important FACTS markets. Several large-scale transmission infrastructure developments have been happening in these countries, which take up a major share of the transmission budget. Due to this, a limited budget is left to be spent on FACTS devices to ensure network resilience and reliability.
- This primary issue of budget limitation has made Latin American countries opt for SVCs in the past as compared to STATCOMs. Historically, only European and North American players have capitalized from the South American FACTS market, but recently Chinese FACTS players are also seen tapping into these markets as they are able to offer better and competitive price points to the local utilities.
- SVC is still a dominant technology in the region, but with the current wave of carbon neutrality and clean electrification i.e., renewables, a need for more resilient and flexible grid will drive the market towards STATCOM in South America.

Evolution of FACTS in North America

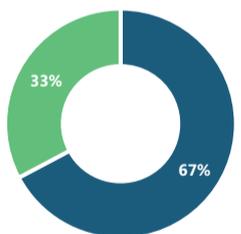
Technology Split Till 2000



Technology Split (2000-2010)



Technology Split (2011-2021)



■ SVC ■ STATCOM

- North America has always been an early adopter of modern technologies. The U.S. has been a key FACTS market as grid reliability has always been a serious topic and the key focus of regulators and grid operators in the country.
- In the late 1990s, the STATCOM technology was in its nascent stage. From the early 2000s, several renewable power plants, especially wind farms started to opt for MV STATCOMs, as the technology enables these renewable generators to meet grid code requirements. High voltage STATCOMs were also introduced in the market and some utilities installed these devices as they recognized its benefits over SVCs. However, till 2010, SVC dominated the market as it was more economical and most of the utilities were able to achieve almost same results with an SVC and space constraints were never a challenge.
- In the last decade, the STATCOM market in the U.S. has gained a lot of traction as the technology has advanced and its features are now widely recognized. The price of STATCOM has also decreased over the years and now fits utilities' budget. In the last five years, most of the installations done by utilities in the U.S. are of STATCOM.