

Offshore Wind HVDC Transmission in the US: A Growing Trend

Offshore wind targets of the US are expected to drive the deployment of HVDC VSC technology in the coming decade. The Biden Administration has declared an ambitious national goal of achieving 30 gigawatts (GW) of offshore wind generation capacity by 2030. In addition to this overarching target, individual states are announcing their own offshore wind goals. Various policies and funding initiatives, including the Inflation Reduction Act and the Department of Energy's cost reduction initiative, will play a crucial role in supporting the development of HVDC in the US.

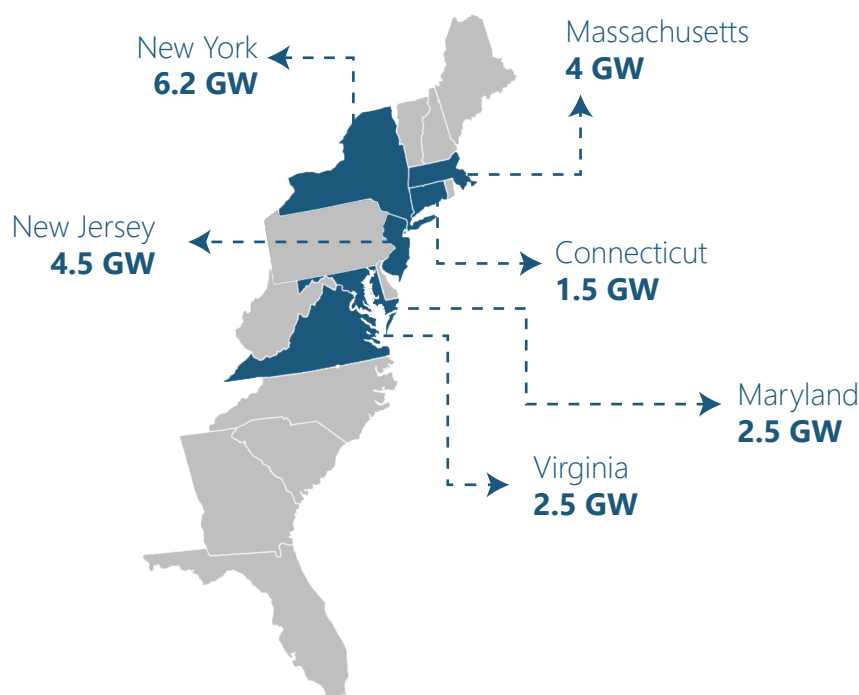
USA Offshore Wind HVDC - VSC transmission (2023 – 2030)

The Biden Administration announced a 30 GW of national offshore wind energy goal by 2030.

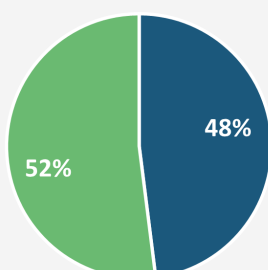
26 GW

Substantial growth in offshore wind is expected in the region in the coming years which will boost the demand for HVDC - VSC systems.

Atlantic Coast: A key region for offshore wind development by 2030



Share of offshore wind vs other renewables in HVDC transmission (2023 – 2030)



■ Offshore Wind ■ Rest of Renewable Energy

Key funding and policies:

- The Inflation Reduction Act specifically designates USD 100 million for interregional electric transmission, with a focus on transmitting electricity generated by offshore wind.
- DOE's HVDC COst REDuction (CORE) Initiative aims to reduce the cost of HVDC systems by 35% by 2035 to promote widespread adoption of the technology.