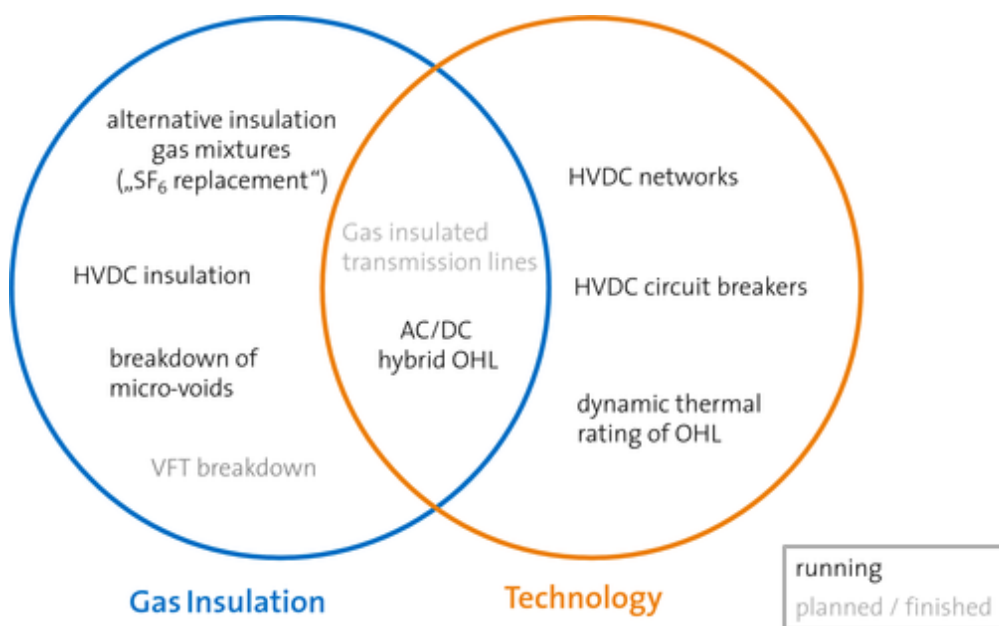


Research

The research focus of the high voltage laboratory (group Prof. Franck) is in the area of technologies for a future sustainable electric energy supply. To enable a significantly increased use of renewable energy (like for example offshore wind or solarthermal from deserts) an increase in transmission capacity is inevitable, which is often envisaged by building an HVDC network in parallel to the existing AC network. Due to the lack of acceptance of society for new overhead line projects, new technologies and methods for increasing the capacity of existing transmission corridors or new technologies for underground transmission have to be found.

Electric power is transmitted exclusively at (ultra) high voltages to decrease the losses. A detailed understanding of gaseous insulation is inevitable; ambient air, sulfur-hexafluorid, or even novel electronegative gases.



Research projects

- [Research Projects Prof. Dr. Christian M. Franck](#)