

## **Dr. Florian Möllenbruck – Mitsubishi Power Europe GmbH**

### **Short abstract**

*The achievement of net-zero emissions goals requires a profound transformation of the energy system based on a broad suite of technologies. Carbon capture, utilisation and storage (CCUS) is considered as part of the solution to reach Paris climate goals. It can contribute to reducing emissions from combustion and industrial processes, which are hard to avoid. Technologies to increase the utilisation of CO<sub>2</sub> are part of circular economy strategies to avoid emissions. Additionally, certain CCUS technologies allow for a removal of CO<sub>2</sub> from the atmosphere as means of reaching “net zero” goals.*

*The first part of the presentation will give insights on KM CDR Carbon Capture Process of MHI capturing 99,5% of Carbon in Flue Gases and on the development of large Scale alkaline electrolysis (100 MW+) for EU's green Hydrogen production.*

*The second part demonstrates that synthetic fuels based on carbon dioxide and hydrogen could already be produced on commercial scale today and be used in any gasoline engine via the existing transport and filling station infrastructure.*