

Abstract for Conference on Co2-based Fuels & Chemicals 2024

Title:

Carbon2Chem® - CO2 emissions from point sources

Carbon2Chem is a cross industrial network of 19 academic and industry partners with the intention to use CO2 from point sources as a feedstock for chemicals like methanol and ammonia. The project started in 2018 with a clear focus on steel mill gases. With the transformation of the steel industry to DR technology the available amount of CO2 from steel mill gas for CCU in the future will drop to approx. 10 % of the current amount. This is why the project expanded to other CO2 point sources from lime kilns and waste incineration. Within the pilot plant in Duisburg the feasibility of the process has been demonstrated under real conditions and has been expanded to a capacity of 50L/day MeOH. Within the next phase of the project further up-scaling steps are planned and ideas to close the carbon cycle are discussed.

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