

Northern Lights project for full-scale CO₂ capture and permanent storage

Thursday, 23rd January 2020, 11 am to 12 pm

HG G 60, ETH Zurich, Rämistrasse 101, 8092 Zurich

Hosts:

- Prof. Dr. Marco Mazzotti, Separation Processes Laboratory
- Dr. Petrisa Eckle, sus.lab, Chair for Sustainability and Technology
- Energy Science Center (ESC)

The Paris Agreement aims to keep the global temperature rise to less than 1.5°C and achieve net-zero emissions in the second half of the century. Deploying Carbon Capture and Storage (CCS) technologies at scale is key in achieving these goals. The Northern Lights Project is part of a Norwegian full-scale CCS project planning to capture CO₂ from two industrial land-based emitters, with ship transportation and permanent storage in a reservoir under the North Sea. The successful realization of this project could provide cost-effective opportunities for achieving negative emissions and a transitioning solution for hard-to-abate Norwegian and European industry sectors.



Kjetil Wilhelmsen works on negotiating the commercial model and the relationship between the Northern Lights project and the Norwegian State, as well as agreements between the Northern Lights and European commercial, third-party emitters for transportation and permanent storage of their CO₂. Key industrial partners come from the hydrogen, metals, cement, waste-to-energy, and refining industries. Kjetil has been with Shell since 2005 and has 20 years' experience in the international upstream oil and gas industry.