



# Metrology Support for Carbon Capture Utilisation and Storage

## About the project

In order to assist Europe to reduce CO<sub>2</sub> emissions and facilitate efficient and safe usage of the CCUS technology the MetCCUS project will address key measurement challenges related to flow metering, emissions monitoring, chemical metrology and the physical properties of CO<sub>2</sub>.

## Main Goals

MetCCUS project aims to develop new metrology tools in the form of Primary Standards and methods, as well as the relevant best practice/guidance, necessary to support industry in carbon capture utilisation and storage

## During the project

- ✓ Development of metrological sound calibrating facilities for gaseous CO<sub>2</sub> with an uncertainty smaller than 2.5%
- ✓ Simulation of precise CO<sub>2</sub> leaks from CCUS infrastructure
- ✓ Investigation of methods to determine the emission of degradation products from capture solvents
- ✓ Development of primary reference materials for impurities in CO<sub>2</sub>
- ✓ Novel experimental measurements of the thermophysical properties of CO<sub>2</sub> in a mixture with capture solvents
- ✓ Validation of equations of state to support the CCUS process and flow metering
- ✓ Set up of procedures and measurements to monitor CCUS infrastructure in terms of corrosion of pipeline materials

