

Innovation is a key aspect in North-CCU-Hub. The implementation of the North-C-Methanol project will provide a perfect backbone for the upscaling of innovative technologies enabling even more and better carbon capture and utilization in the North Sea Port region. The innovation trajectory is coordinated by the local knowledge institutes: Ghent University, CAPTURE and Bio Base Europe Pilot Plant and is supported by the Flemish spearhead clusters Catalisti and Flux50. Innovation opportunities are present at several points of the CCU value chain:

- **Pre-conversion** innovations include the generation of green hydrogen and capture of CO₂
- **Conversion** innovations include different (bio)chemical technologies for conversion to methanol, other chemical building blocks (e.g. formic acid, ethanol) or directly to higher added value products
- **Post conversion** innovations include the upgrading of chemical building blocks to higher added value chemicals and innovative applications of green methanol.

