



IP: MISSION INNOVATION REPORT

Mission Innovation is a global initiative of 24 countries and the European commission (on behalf of the European Union). In 2016, Mission Innovation members endorsed the seven Innovation Challenges. The objectives of the Carbon Capture Innovation Challenge are to identify and prioritize breakthrough technologies; and recommend research, development, and demonstration pathways and collaboration mechanisms. The report from the Challenge CCUS workshop held in Trondheim in June 2019 was recently released in October 2019.

During the workshop, several stakeholders introduced 6 topics: Decarbonising industry sectors; The role of CCS in enabling clean hydrogen; Storage and CO₂ networks; Storage monitoring; Going Climate positive; and CO₂ utilization. Later, all attendees, divided into groups, were able to debate on those topics. The discussions and conclusions were collected in this report.

While other documents from the literature are usually focused on the technical or economic analysis of CCUS technologies, this report collects the challenges, and the main short, medium, and long-term actions.

Common recommended actions to all the topics were collaboration (between sectors, academia and industry, and between those and governments) to accelerate the development of emerging technologies and prove established ones; contribute to the knowledge transfer to accelerate the deployment along the sectors; and to complete the entire CCS chain. Moreover, a supportive policy framework able to accelerate the deployment and de-risk CCS projects will be essential.

Each topic, additionally, identified specific research needs. For example, in regard to decarbonising the industry sectors, it was identified that, in the long term, incentives for low CO₂ value products could potentially encourage consumers to buy low CO₂ footprints products, which would enhance its business model. For the hydrogen sector, it was highlighted the need of infrastructure for CO₂ transport and storage, and the implementation of clusters with hydrogen production and CCS.

In summary, this event was a good opportunity to set up the needs of several sectors linked to CCUS, taking advantage of the opportunity of involving stakeholders from governments, academia, industry, and international organisations.

Tim Dixon and Monica Garcia from IEAGHG were active as presenters and facilitators at the workshop and contributors to this report. The report and presentations can be found in: <https://www.sintef.no/en/events/mission-innovation-ccus-workshop/>

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